

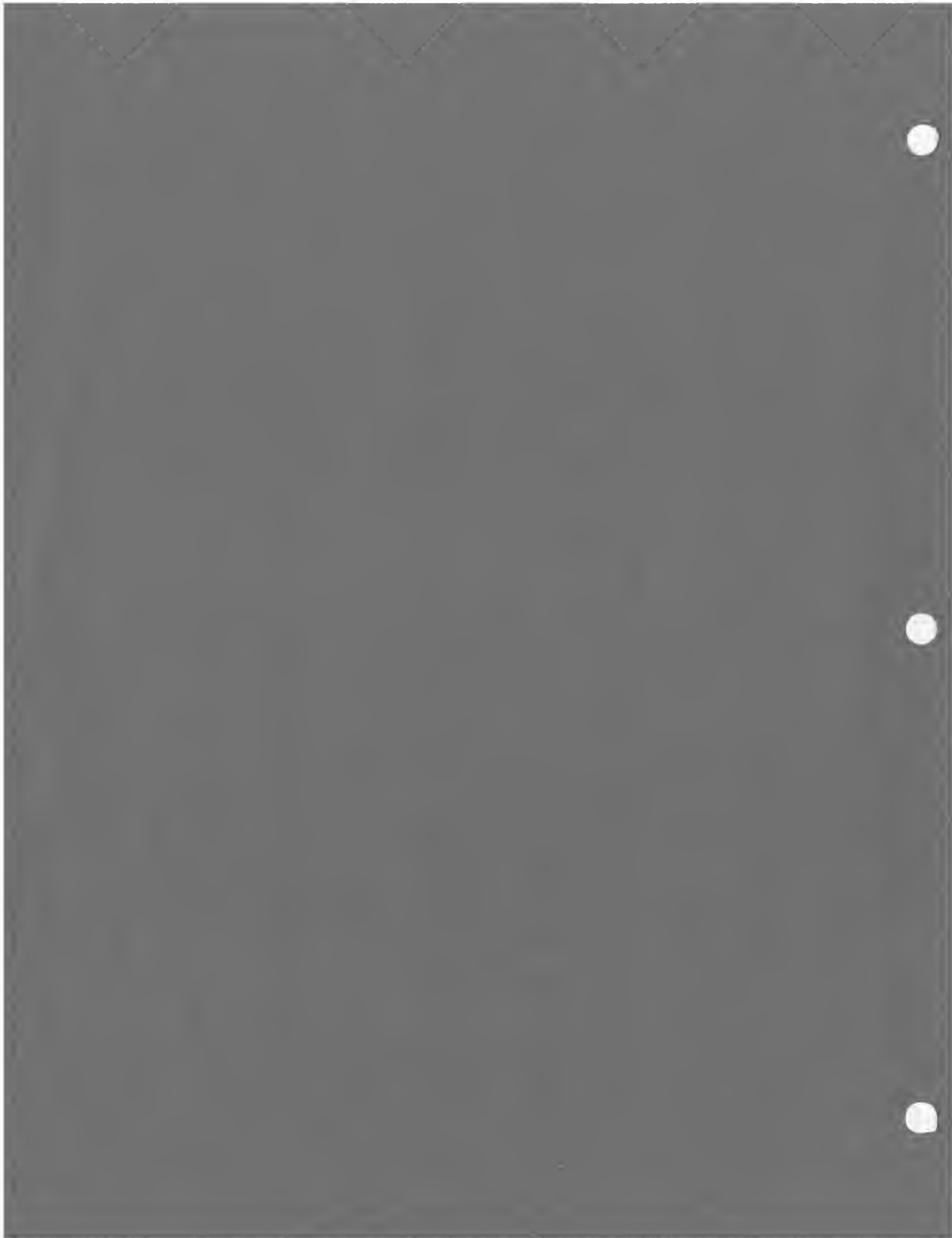
**U.S. Patent and Trademark Office**

**Patent Full-Text/APS File**

**Information Dissemination Organizations  
Office of Electronic Information Products**

**June 1985**

**With revisions February 1997**



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6/27/88

Update 2 - Patent Full-Text/APS File, June 1985

SPECIAL INSTRUCTIONS:

Update 2 to the Patent Full-Text/APS File technical reference is being published to include the appearance of text data for tables and "in-line" equations on the file.

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The following pages will be updated as indicated. Change bars identify new and/or changed information.

<u>Page</u>	<u>Explanation</u>
A-1	Include an explanation for the use of a FNT ID Code in a table.
A-2	Three additional ID Codes are being established to support table and equation text data.
B-1	Include an explanation for table data records.
B-2, B-3	The addition of a call-out identifier for vertical spacing.
D, D-51 thru D-275	Include machine-readable patent documents having tables and "in-line" equations.
E, E-1, E-2 E-44 thru E-273	Include printed patent documents having tables and "in-line" equations.





6/20/88

Update 1 - Patent Full-Text/APS File, June 1985

The following pages to the Patent Full-Text/APS File will be updated as indicated. Change bars identify new and/or changed information.

<u>Page</u>	<u>Explanation</u>
20	The addition of Series Code 7.
52	Include a NOTE identifying the use of the first position of ASSG/COD.
101	Change the NOTE explaining the appearance of LREP/ATT record(s).
115	Correct the ID Code (positions 1-4) of the PCT Publication Date from PCT to PCD.
C-1 thru C-10	The entire Appendix C - Special Characters is being replaced. Changes only apply to patents issued January 1971 thru December 1974. The changes are being made to Column 1 - +290 thru +299 and +338 thru +489. Column 2 of these items will have the last character appearing after the period (.).



## Purpose

The purpose of this technical reference is to provide a detailed description of the organization, content and use of the patent full-text/APS file.

## Patent Full-Text/APS File

The files resides on a 9-track, ASCII 6250 BPI, magnetic tape. Reference Figure 1 - American National Standard Code for Information Interchange. The data records on the file will be 80 characters in length, blocked 25, for a block size of 2000 characters. The contents of the file will appear as follows:

- a. Standard Header Labels
- b. Control Header Record A control header record will appear as the first record on the file. This record will contain information pertinent to the APS system, to include the issue date of the file.
- c. Data Records The data records are 80 characters in length, consisting of data elements as defined in this technical reference. The first data element to appear will be a logical group. Each logical group identifies a section of a patent, such as the bibliographic data, the abstract and the claims. Within each logical group its associated data will be present. This data can appear as a fixed length field containing bibliographic data or variable length containing bibliographic or text data. All data within a logical group will be identified with ID Codes.

Logical Group ID Codes will contain a four-position alpha identifier. ID Codes identifying data fields will contain a three-position alpha identifier followed by a space. Some types of data will require continuation records. The ID Code in continuation records will contain spaces. Reference Appendix B - The Appearance of Text, for additional information.

The following appendices are included that define the appearance of data on the patent full-text/APS file.

Appendix A - Definition of Paragraph ID Codes.

Appendix B - The Appearance of Text.

Appendix C - Special Characters.

Appendix D - Example of Patent Documents as they appear in machine-readable form.

Appendix E - Example of Patent Documents as they appear when issued and printed.

- d. Standard Trailer Labels

The following is a summary of the logical groups and the data fields within each logical group. This summary is presented in the sequence that the data on the file will appear.

Logical Group: Patent Bibliographic Information ID CODE: PATN

REQUIRED

Description : Contains the bibliographic information that appears on the front page of a patent.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Patent Number	WKU	8	A/N	R
Series Code	SRC	1	N	R
Application Number	APN	6	N	R
Application Type	APT	1	N	R
Publication Level	PBL	2	A	O
Art Unit	ART	3	N	R
Application Filing Date	APD	8	N	R
Title of Invention	TTL	V(255)	A/N	R
Issue Date	ISD	8	N	O
Number of Claims	NCL	V(4)	N	R
Exemplary Claim Number(s)	ECL	V(14)	A/N	R
Assistant Examiner	EXA	V	A/N	O
Primary Examiner	EXP	V	A/N	R
Number of Drawing Sheets	NDR	V(4)	N	O
Number of Figures	NFG	V(4)	N	O
Disclaimer Date	DCD	8	N	O
Number of Pages of Specifications	NPS	V(4)	N	O
Term of Patent	TRM	V(4)	N	O

Logical Group: INVENTOR

ID CODE: INVT

REQUIRED

Description : This group contains information of the inventor.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Inventor Name	NAM	V	A/N	R
Street	STR	V	A/N	O
City	CTY	V	A/N	R
State	STA	2	A	O
Country	CNT	3	A	O
Zip Code	ZIP	5	N	O
Rule 47 Indicator	R47	1	N	O
Inventor Descriptive Text	ITX	V	A/N	O

Logical Group: ASSIGNEE

ID CODE: ASSG

OPTIONAL

Description : Contains the data identifying the assignee(s)  
of an invention at the time of issue.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Assignee Name	NAM	V	A/N	R
City	CTY	V	A/N	O
State	STA	2	A	O
Country	CNT	3	A	O
Zip Code	ZIP	5	N	O
Assignee Type Code	COD	2	N	R
Assignee Descriptive Text	ITX	V	A/N	O

Logical Group: FOREIGN PRIORITY

ID CODE: PRIR

OPTIONAL

Description : Contains the data indicating in which foreign countries an application claims priority.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Country Code	CNT	3	A	R
Priority Application Date	APD	8	N	R
Priority Application Number	APN	V	A/N	R

Logical Group: REISSUE

ID CODE: REIS

OPTIONAL

Description : Contains the data describing the reissue of a patent.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Reissue Code	COD	2	N	R
Application Number	APN	6	N	R
Application Filing Date	APD	8	N	R
Patent Number	PNO	9	A/N	R
Issue Date	ISD	8	N	R

Logical Group: RELATED U.S. APPLICATION DATA

ID CODE: RLAP

OPTIONAL

Description : Contains the coded version of parent case/continuation data of prior applications related to this patent.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Parent Code	COD	2	N	R
Application Number	APN	6	N	R
Application Filing Date	APD	8	N	O
Patent Status Code	PSC	1	N	R
Patent Number	PNO	8	A/N	O
Issue Date	ISD	8	N	O

Logical Group: CLASSIFICATION

ID CODE: CLAS

REQUIRED

Description : Provides the U.S. and International classification codes for patents.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
US Classification	OCL	V(9)	A/N	R
Cross Reference	XCL	V(9)	A/N	O
Unofficial Reference	UCL	V(9)	A/N	O
Digest Reference	DCL	V(9)	A/N	O
Edition Field	EDF	1	N	O
International Classification	ICL	V(14)	A/N	O
Field of Search Class	FSC	3	A/N	O
Field of Search Subclasses	FSS	V	A/N	O

Logical Group: U.S. REFERENCE

ID CODE: UREF

OPTIONAL

Description : Contains the data identifying patents which are referenced as prior art.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Patent Number	PNO	V(9)	A/N	R
Issue Date	ISD	8	N	R
Patentee Name	NAM	V	A/N	R
US Classification	OCL	V(9)	A/N	O
Cross Reference	XCL	V(9)	A/N	O
Unofficial Reference	UCL	V(9)	A/N	O

Logical Group: FOREIGN REFERENCE

ID CODE: FREF

OPTIONAL

Description : Contains the data identifying the foreign patents cited as references.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Foreign Patent No.	PNO	V	A/N	R
Issue Date	ISD	8	N	R
Country Code	CNT	3	A	R
Classification	OCL	V(9)	A/N	R

Logical Group: OTHER REFERENCE

ID CODE: OREF

OPTIONAL

Description : Contains data for other referenced cited as prior art.

Field Name                      ID Code

Reference Paragraphs    PAL

Text Data



Logical Group: LEGAL INFORMATION

ID CODE: LREP

OPTIONAL

Description : Contains data describing the attorneys or representative representing an applicant's patent.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Legal Firm Name	FRM	V	A/N	O
Principal Attorney Name	FR2	V	A/N	O
Associate Attorney Name	AAT	V	A/N	O
Agent's Name	AGT	V	A/N	O
Attorney Name	ATT	V	A/N	O
Registration Number	REG	5	N	O
Representative Name	NAM	V	A/N	O
Street	STR	V	A/N	O
City	CTY	V	A/N	O
State	STA	2	A	O
Country	CNT	3	A	O
Zip Code	ZIP	5	N	O

Logical Group: PCT INFORMATION

ID CODE: PCTA

OPTIONAL

Description : Provides the descriptive data for related PCT information.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
PCT Number	PCN	14	A/N	R
PCT 371 Date	PD1	8	N	R
PCT 102 (e) Date	PD2	8	N	R
PCT Filing Date	PD3	8	N	R
PCT Publication No.	PCP	8	N	O
PCT Publication Date	PCD	8	N	O

Logical Group: ABSTRACT

ID CODE: ABST

OPTIONAL

Description : Contains the abstract section from a patent.

<u>Field Name</u>	<u>ID Code</u>
-------------------	----------------

Abstract Paragraphs	PAX
Text Data	

Logical Group: GOVERNMENT INTEREST

ID CODE: GOVT

OPTIONAL

Description : Contains data describing the Government's interest in a patent.

<u>Field Name</u>	<u>ID Code</u>
-------------------	----------------

Paragraphs	PAX
Text Data	

Logical Group: PARENT CASE

ID CODE: PARN

OPTIONAL

Description : Contains the text of parent case/continuation data of prior applications related to this patent.

<u>Field Name</u>	<u>ID Code</u>
-------------------	----------------

Paragraphs	PAX
Text Data	

Logical Group: BRIEF SUMMARY

ID CODE: BSUM

REQUIRED

Description : Contains the summary description of the invention.

Field Name

ID Code

Paragraphs

PAX

Text Data

Logical Group: DRAWING DESCRIPTION

ID CODE: DRWD

OPTIONAL

Description : Identifies the drawing(s) presented in a patent.

Field Name

ID Code

Paragraphs

PAX

Text Data

Logical Group: DETAIL DESCRIPTION

ID CODE: DETD

OPTIONAL

Description : Contains the detailed technical specification from a patent.

Field Name

ID Code

Paragraphs

PAX

Text Data

Logical Group: CLAIMS INFORMATION

ID CODE: CLMS

REQUIRED

Description : Contains the claim(s) information from a patent.

<u>Field Name</u>	<u>ID Code</u>	<u>Field Size (Max.)</u>	<u>Field Type</u>	<u>Required or Optional</u>
Claims Statement	STM	V	A/N	O
Claims Number	NUM	V(4)	N	R
Claim Text Data Paragraphs	PAX			

Logical Group: DESIGN CLAIM

ID CODE: DCLM

OPTIONAL

Description : Contains the claim information for a design patent.

<u>Field Name</u>	<u>ID Code</u>
Text Data Paragraphs	PAX

NOTE: PAX that appears throughout this summary represents the paragraph ID Code that appear in Appendix A.

# American National Standard Code for Information Interchange

<div> <div> b7 b6 b5 </div> <div> b4 b3 b2 b1 </div> <div> COLUMNS ROW </div> </div>					0 0 0	0 0 1	0 1 0	0 1 1	1 0 0	1 0 1	1 1 0	1 1 1
					0	1	2	3	4	5	6	7
0	0	0	0	0	NUL	DLE	SP	0	@	P	\	p
0	0	0	1	1	SOH	DC1	!	1	A	Q	a	q
0	0	1	0	2	STX	DC2	"	2	B	R	b	r
0	0	1	1	3	ETX	DC3	#	3	C	S	c	s
0	1	0	0	4	EOT	DC4	\$	4	D	T	d	t
0	1	0	1	5	ENQ	NAK	%	5	E	U	e	u
0	1	1	0	6	ACK	SYN	&	6	F	V	f	v
0	1	1	1	7	BEL	ETB	/	7	G	W	g	w
1	0	0	0	8	BS	CAN	(	8	H	X	h	x
1	0	0	1	9	HT	EM	)	9	I	Y	i	y
1	0	1	0	10	LF	SUB	*	:	J	Z	j	z
1	0	1	1	11	VT	ESC	+	;	K	[	k	{
1	1	0	0	12	FF	FS	,	<	L	\	l	
1	1	0	1	13	CR	GS	-	=	M	]	m	}
1	1	1	0	14	SO	RS	.	>	N	^	n	~
1	1	1	1	15	SI	US	/	?	O	—	o	DEL

FIGURE 1

ANSI-VOLUME-LABEL - VOL1

Volume-Header Label (VOL1)

CP	Field Name	L	Content
1 to 3	Label Identifier	3	VOL
4	Label Number	1	1
5 to 10	Volume Identifier	6	"a" characters. Assigned permanently by the owner to identify this volume.
11	Accessibility	1	"a" character. Indicates restrictions on access to the information in this volume. Space means no restrictions. The numeric characters and all special characters of the "a" set are reserved for operating system definition. "A" through "Z" are reserved for installation assignment.
12 to 37	Reserved for Future Standardization	26	Spaces.
38 to 51	Owner Identifier	14	"a" characters. Identifies the owner of the volume. Identifiers are not specified in this standard.
52 to 79	Reserved for Future Standardization	28	Spaces.
80	Label-Standard Version	1	Indicates the version of this standard to which the labels and data formats on this volume conform. "3" means this version.

"a" characters = alphanumeric. "n" characters = numeric.

If a numeric (n) value is shorter than the field, then the value is right-adjusted and unused positions filled with zeros. If an alphanumeric (a) value is shorter than the field, then the value is left-adjusted and unused positions filled with spaces.

ANSI-STANDARD-LABEL - HDR1

First File-Header Label (HDR1)

CP	Field Name	L	Content
1 to 3	Label Identifier	3	HDR
4	Label Number	1	1
5 to 21	File Identifier	17	"a" characters. Assigned by the originator to identify the file.
22 to 27	File-Set Identifier	6	"n" characters. Identifies this file set among other file sets.
28 to 31	File Section Number	4	"n" characters. Identifies this section among the sections of this file.
32 to 35	File Sequence Number	4	"n" characters. Identifies this file among the files of this file set.
36 to 39	Generation Number	4	"n" characters. Distinguishes among successive generations of this file.
40 to 41	Generation Version Number	2	"n" characters. Distinguishes among successive iterations of the same generation.
42 to 47	Creation Date	6	One space followed by two "n" characters for the year followed by three "n" characters for the day (001 to 366) within the year. Indicates date on which this file was created. Space followed by five zeros means that no creation date is specified.
48 to 53	Expiration Date	6	Same format as Creation Date. Indicates date on which this file may be overwritten. Space followed by five zeros means that this file is expired.
54	Accessibility	1	"a" character. Indicates restrictions on access to the information in this file. Space means no restrictions. The numeric characters and all special characters of the "a" set are reserved for operating system definition (see System Code (CP 61-73)). "A" through "Z" are reserved for installation assignment.
55 to 60	Block Count	6	000000

CP	Field Name	L	Content
61 to 73	System Code	13	"a" characters. Identifies the system that recorded this file. Identifiers are not specified in this standard. Spaces means that system-defined controls on file access, buffer offset, Reserved for System Use, and Other System Labels should not be used.
74 to 80	Reserved for Future Standardization	7	Spaces

ANSI-STANDARD-LABEL - HDR2

Second File-Header Label (HDR2)

CP	Field Name	L	Content
1 to 3	Label Identifier	3	HDR
4	Label Number	1	2
5	Record Format	1	F - FIXED LENGTH D - VARIABLE LENGTH IN DECIMAL IN FIRST 4 CHRS. V - VARIABLE LENGTH IN BINARY IN FIRST 2 CHRS. U - UNDEFINED I - VARIABLE LENGTH IN REC AT FIXED LOCATION L - LINKS
6 to 10	Block Length	5	"n" characters. Specifies the maximum number of characters per block.
11 to 15	Record Length	5	"n" characters. Specifies the record length in conjunction with Record Format (CP 5).  If Record Format is F, this field contains the actual record length.  If Record Format is D, this field contains the maximum record length including the count field.  If Record Format is S, this field contains the maximum record length, excluding all the Segment Control Words. In this case, 00000 indicates that the maximum record length may be greater than 99999.
16	DENSITY	1	0 800 2-20u 1 650 3 16u 4 6250

CP	Field Name	L	Content
17 18	Reserved for Future Standardization	2	Spaces
19	External Form	1	4 - EBCDIC, 5 - ASCII
20 to 50	Reserved for System Use	31	"e" characters. Not intended for use in an interchange environment.
51 to 52	Buffer-Offset Length	2	"n" characters. Specifies the length in characters of any additional field inserted before the first record in a data block.
53 to 80	Reserved for Future Standardization	28	Spaces



FORM TP075-10 U.S. DEPT. OF COMMERCE  
(REV. 11-76)  
(FORMERLY PTO-1053)

File Mark

F  
M

5

10

15

20

25

30

35

40

45

50

A 1-position file mark will follow the HDR2 header label and the last data record on the file.  
Two file marks will follow the EOF2 (End-of-file) label record.

RECORD LAYOUT	Patent Full-Text/APS File						Logical Group/Field	
							<u>  x  </u> Required	<u>  </u> Optional
Control Header Record								
H H H H H F		A P S 1			I S S U E -	ISSUE DATE		
5	10	15	20	25	30	35	40	

Each file will contain the patents issued for a given week. The first data record on the file will be a control header record identifying the system.

Positions 1-6 will contain: HHHHHF

Positions 15-18 will contain: APS1

Positions 27-34 will contain: ISSUE -

Positions 35-40 will contain the issue date in the format YYMMDD

Positions 7-14, 19-35 and 41-80 will contain spaces.

RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field  x Required Optional
Logical Group - PATN - Patent bibliographic Information		
P A T N		
	5 10 15 20 25 30 35 40 45 50	
	55 60 65 70 75 80	

The ID Code (Positions 1-4) will contain: PATN identifying logical group Patent Bibliographic Information. Positions 5-80 will contain spaces.

The data records within the logical group PATN will contain bibliographic information that appears on the front page of a patent. ID Codes and associated data for the PATN logical group are defined on the following pages.

Data records will be associated with every type of patent document unless otherwise specified.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field									
												<u>  x  </u> Required <u>      </u> Optional									
Patent Number - WKU - (PATN)																					
W K U		Patent Number		C D																	
5		10		15		20		25		30		35		40		45		50			

Patent Full-Text/APS File

Patent Number - WKU - (PATN) - (continued)

- Invention SIR  
(Utility)      Position 6      - A constant "H" identifying the SIR document as a Utility SIR.  
                         Positions 7-13      - A seven-position numeric identification, right justified with leading zeros.
- Plant Patents -      Positions 6-7      - A two-position constant "PP" identifying the patent as a Plant.  
   Positions 8-13      - A six-position numeric identification, right justified, with a leading zero.
- Reissue Patents -      Positions 6-7      - A two-position constant "RE" identifying the patent as a Reissue  
   Positions 8-13      - A six-position numeric identifying, right justified, with a leading zero.
- Defensive Publications -      Position 6      - A constant "T" identifying the document as a Defensive Publications.  
   Position 7-13      - A seven-position numeric identification, right justified, with a leading zero.
- Invention  
- (Utility) Patent - Positions 6-13      - An eight-position numeric identification, right justified, with a leading zero.

RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field
		<u>x</u> Required Optional
Series Code - SRC - (PATN)		
<div style="display: flex; justify-content: space-between;"> <span>S R C</span> <span>5</span> <span>10</span> <span>15</span> <span>20</span> <span>25</span> <span>30</span> <span>35</span> <span>40</span> <span>45</span> <span>50</span> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <span>55</span> <span>60</span> <span>65</span> <span>70</span> <span>75</span> <span>80</span> </div>		

The ID Code (Positions 1-4) will contain SRC identifying the record as a Series Code record.

<u>Code</u>	<u>Series</u>	<u>Filing Dates</u>
2	Pre-1948	Earlier than Jan. 1, 1948
3	1948	Jan. 1, 1948 - Dec. 31, 1959
4	1960	Jan. 1, 1960 - Dec. 31, 1969
5	1970	Jan. 1, 1970 - Dec. 31, 1978
6	1980	Jan. 1, 1979 - Dec. 31, 1986
7		Jan. 1, 1987 - Current

Positions 7-80 will contain spaces.



RECORD LAYOUT		Patent Full-Text/APS File		Logical Group/Field	
				<input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional	
Application Type - APT - (PATN)					
A P T 5		TYPE 10 15 20 25 30 35 40 45 50			
		55 60 65 70 75 80			

The ID Code (Positions 1-4) will contain APT identifying the record as an application type record.

Position 6 will contain a one-position numeric application type as defined below:

- 1 - Invention (Utility) Patent
- 2 - Reissue Patent
- 3 - TVPP Application (if present)
- 4 - Design Patent
- 5 - Defensive Publication
- 6 - Plant Patent
- 7 - Statutory Invention Registration (SIR)

Positions 7-80 will contain spaces.







RECORD LAYOUT			Patent Full-Text/APS File																																	Logical Group/Field  <u>  x  </u> Required <u>      </u> Optional	
Application Filing Date - APD - (PATN)																																					
A P D		5	Application Filing Date		10	15	20	25	30	35	40	45	50																								
										55	60	65	70	75	80																						

The ID Code (Positions 1-4) will contain APD identifying the record as an Application Filing Date record.

Positions 6-13 will contain an eight-position numeric filing date in the format YYYYMMDD.  
Positions 14-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field <u>  x  </u> Required <u>     </u> Optional	
		Title of Invention - TTL (PATN)											
T T L		Title of Invention											
5		10	15	20	25	30	35	40	45	50			
55		60	65	70	75	80							

26

The ID Code (Positions 1-4) will contain TTL identifying the record as a Title of Invention record.

Positions 6-80 will contain a variable length alphanumeric title of invention, left justified with trailing spaces. A title of invention may have up to a maximum of 255 characters, therefore, continuation record(s) could be present. Reference Appendix B - The Appearance of Text.

RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field  <u>  x  </u> Required <u>     </u> Optional	
Issue Date - ISD - (PATN)															
I S D		Issue Date													
		5	10	15	20	25	30	35	40	45	50				
		55	60	65	70	75	80								

27

The ID Code (Positions 1-4) will contain ISD identifying the record as an Issue Date record.

Positions 6-12 will contain an eight-position numeric issue date in the format YYYYMMDD.

Positions 14-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File																Logical Group/Field  <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional		
Number of Claims - NCL - (PATN)																				
N C L		No. of Claims																		
		5	10	15	20	25	30	35	40	45	50									
		55	60	65	70	75	80													

28

The ID Code (Positions 1-4) will contain NCL identifying the record as a Number of Claims record.

Position 6 will begin a variable length numeric field defining the number of claims. A trailing space terminates the field. The remainder of the record, through position 80, contains spaces.

NOTE: Defensive Publications do not contain claims.

RECORD LAYOUT		Patent Full-Text/APS File																Logical Group/Field  <u>  x  </u> Required <u>    </u> Optional	
Exemplary Claim Number - ECL - (PATN)																			
E C L	5	Exemplary Claim Number																	
		10	15	20	25	30	35	40	45	50									
		55	60	65	70	75	80												

The ID Code (Positions 1-4) will contain ECL identifying the record as an Exemplary Claim Number record.

Position 6 will begin a variable length alphanumeric field defining the claim number(s) for the claim(s) that is the primary claim(s). A trailing space would terminate the field. If, more than one claim number appears in this field each claim number would be separated by a comma. The remainder of the record, through position 80, contains spaces.

NOTE: Defensive Publications do not contain Claims.

Since the issue date 10/1/74 the exemplary claim(s) have appeared in the Official Gazette.

RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field  <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Assistant Examiner - EXA - (PATN)															
E X A		Assistant Examiner													
		5	10	15	20	25	30	35	40	45	50				
		55	60	65	70	75	80								

The ID Code (Positions 1-4) will contain EXA identifying the record as an Assistant Examiner record. This record will only be present if the patent had an Assistant Examiner.

Position 6 will begin a variable length alphanumeric field containing the name of the assistant examiner, (Last name; first name, middle name/or initial). Punctuation would be included in the name, trailing spaces would terminate the field.

If continuation record(s) are required, positions 6-80 will contain the continuation data. Reference Appendix B - The Appearance of Text.

NOTE: Defensive Publications will not have a Assistant Examiner - EXA record.



RECORD LAYOUT		Patent Full-Text/APS File														Logical Group/Field  <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional		
Primary Examiner - EXP - (PATN)																		
E X P		Primary Examiner																
		5	10	15	20	25	30	35	40	45	50							
		55	60	65	70	75	80											

The ID Code (Positions 1-4) will contain EXP identifying the record as a Primary Examiner record.

Position 6 will begin a variable length alphanumeric field containing the name of the primary examiner, (Last name; first name, middle/or initial). Punctuation would be included in the name, trailing spaces would terminate the field.

If continuation record(s) are required, positions 6-80 will contain the continuation data. Reference Appendix B - The Appearance of Text.

NOTE: Defensive Publications will not have a Primary Examiner - EXP record.

RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field _____ Required <u>  x  </u> Optional			
Number of Drawing Sheets - NDR - (PATN)																	
N D R		No. of Drawings															
		5	10	15	20	25	30	35	40	45	50						
												55	60	65	70	75	80

32

The ID Code (Positions 1-4) will contain NDR identifying the record as a Number of Drawing Sheets record.

Position 6 will begin a variable length numeric field containing the number of drawing within the patent. A trailing space would terminate the field. The remainder of the record, through position 80, contains spaces.

RECORD LAYOUT				Patent Full-Text/APS File																								Logical Group/Field  <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional			
Number of Figures - NFG - (PATN)																															
N F G				No. of Figures																											
				5	10	15	20	25	30	35	40	45	50																		
															55	60	65	70	75	80											

33

The ID Code (Positions 1-4) will contain NFG identifying the record as a Number of Figures record.

Position 6 will begin a variable length numeric field containing the number of figures within the patent. A trailing space would terminate the field. The remainder of the record, through position 80, contains spaces.

RECORD LAYOUT		Patent Full-Text/APS File																														Logical Group/Field  Required <u>x</u> Optional	
Disclaimer Date - DCD - (PATN)																																	
D C D		Disclaimer Date																															
		5	10	15	20	25	30	35	40	45	50																						
		55	60	65	70	75	80																										

The ID Code (Positions 1-4) will contain DCD identifying the record as a Disclaimer Date record.

Positions 6-13 will contain an eight-position numeric disclaimer date in the format YYYYMMDD.

Positions 14-80 will contain spaces.

RECORD LAYOUT				Patent Full-Text/APS File																Logical Group/Field  <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Number of Pages of Specifications - NPS - (PATN)																					
N P S				No. of Pages Spec.																	
				5	10	15	20	25	30	35	40	45	50								
				55	60	65	70	75	80												

The ID Code (Positions 1-4) will contain NPS identifying the record as a Number of Pages of Specifications record. A NPS record will only be present for Defensive Publications.

Position 6 will begin a variable length numeric field containing the number of pages of specifications for a Defensive Publication. A trailing space would terminate the field. The remainder of the record, through position 80, contains spaces.

RECORD LAYOUT				Patent Full-Text/APS File																Logical Group/Field	
																				<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Term of Patent - TRM - (PATN)																					
T R M				Term of Patent																	
				5	10	15	20	25	30	35	40	45	50								
				55	60	65	70	75	80												

The ID Code (Positions 1-4) will contain TRM identifying the record as a Term of Patent record.  
 A TRM record will only be present for Design Patents.

Position 6 will begin a variable length alphanumeric field containing the term of patent.  
 A term of 14 years would appear as - 14 - and a term of 3½ years would appear as - 3.5.  
 A trailing space would terminate the field. The remainder of the record, through position 80, contains spaces.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field	
			<u>  x  </u> Required	<u>     </u> Optional
Logical Group - INVT - Inventor Information				
I N V T				
	5	10	15	20
				25
				30
				35
				40
				45
				50

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The ID Code (Positions 1-4) will contain INVT identifying logical group Inventor Information. Positions 5-80 will contain spaces.

The data records within a logical group INVT will contain name and address information on an Inventor. Multiple inventors could be present and each inventor would begin a new logical group INVT. ID Codes and associated data for the INVT logical group are defined on the following pages.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field							
												<input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional							
Inventor Name - NAM - (INVT)																			
N A M		Inventor Name																	
5		10		15		20		25		30		35		40		45		50	
55		60		65		70		75		80									

The ID Code (Positions 1-4) will contain NAM identifying the record as an Inventor Name record.

Position 6 will begin a variable length alphanumeric field containing the Inventor Name. Trailing spaces would terminate the field.

If continuation record(s) are required, positions 6-80 will contain the continuation data.  
Reference B - The Appearance of Text.

The appearance of the Inventor's Name will be as follows:

Inventor's Name - 1) Last name, (Jr., etc.); the last name is first separated by a coma if additional description is needed, i.e., Jr., Senior, III (the third), etc. The entire surname is separated from the first name by a semi-colon (;) and a space. 2) First - A space follows the first name of the inventor. 3) Middle initial or middle name.



RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field	
														<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Inventor Street Address - STR - (INVT)															
S T R		5	Inventor Street Address												
			10	15	20	25	30	35	40	45	50				
			55	60	65	70	75	80							

The ID Code (Positions 1-4) will contain STR identifying the record as an Inventor Street Address record.

Position 6 will begin a variable length alphanumeric field containing the Inventor Street Address. Trailing spaces would terminate the field.

If the continuation record(s) are required, positions 6-80 will contain the continuation data. Reference Appendix B - The Appearance of Text.

RECORD LAYOUT			Patent Full-Text/APS File																																	Logical Group/Field							
																																				<u>  x  </u> Required							
																																				<u>      </u> Optional							
Inventor City Address - CTY - (INVT)																																											
C	T	Y	5	Inventor City Address																																							
				10	15	20	25	30	35	40	45	50																															
				55	60	65	70	75	80																																		

40

The ID Code (Positions 1-4) will contain CTY identifying the record as an Inventor City Address record.

Position 6 will begin a variable length alphanumeric field containing the Inventor City Address. Trailing spaces would terminate the field.

If continuation record(s) are required, positions 6-80 will contain the continuation data. The Reference Appendix B - The Appearance of Text.

RECORD LAYOUT	Patent Full-Text/APS File															Logical Group/Field	
																<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Inventor State Address - STA - (INVT)																	
S T A		5	S T A T E		10	15	20	25	30	35	40	45	50				
										55	60	65	70	75	80		

The ID Code (Positions 1-4) will contain STA identifying the record as an Inventor State Address record.

Positions 6-7 will contain a two-position alphabetic state abbreviation. Reference Table 2, U.S. Post Office Standard State Abbreviations.  
Positions 8-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field  Required <u>x</u> Optional	
Inventor Country Address - CNT - (INVT)															
C N T		5	COUN- TRY		10	15	20	25	30	35	40	45	50		
					55	60	65	70	75	80					

The ID Code (Positions 1-4) will contain CNT identifying the record as an Inventor Country Address record.

Positions 6-8 will contain an alphabetic country abbreviation as follows: A two-character country abbreviation will appear for all patents issued prior to July 4, 1978. A three-character country abbreviation will appear for all patents issued on or after July 4, 1978. Reference Table 3A International Country Abbreviation - 2-Character and Table 3B International Country Abbreviation - 3-Character. Positions 9-80 will contain spaces.

NOTE: A STA record and a CNT record cannot be present for the same address. This pertains to all addresses throughout the file.

RECORD LAYOUT		Patent Full-Text/APS File																Logical Group/Field  <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Inventor Zip Code Address - ZIP - (INVT)																			
Z I P		Zip Code																	
				5      10      15      20      25      30      35      40      45      50 															
				55      60      65      70      75      80 															

The ID Code (Positions 1-4) will contain ZIP identifying the record as an Inventor Zip Address record.

Positions 6-10 will contain a five-position numeric U.S. Postal Zip Code.  
 Positions 11-80 will contain spaces.

RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional																															
Rule 47 Indicator - R47 - (INVT)																																	
<table border="1"> <tr> <td data-bbox="65 323 217 522">R 4 7</td> <td data-bbox="217 323 259 522">5</td> <td data-bbox="259 323 302 522">4</td> <td data-bbox="302 323 408 522"></td> <td data-bbox="408 323 514 522">10</td> <td data-bbox="514 323 621 522">15</td> <td data-bbox="621 323 727 522">20</td> <td data-bbox="727 323 834 522">25</td> <td data-bbox="834 323 940 522">30</td> <td data-bbox="940 323 1046 522">35</td> <td data-bbox="1046 323 1153 522">40</td> <td data-bbox="1153 323 1259 522">45</td> <td data-bbox="1259 323 1366 522">50</td> </tr> <tr> <td colspan="13" data-bbox="65 522 1238 712"> <table border="1"> <tr> <td data-bbox="65 522 217 712"></td> <td data-bbox="217 522 259 712">55</td> <td data-bbox="259 522 366 712">60</td> <td data-bbox="366 522 472 712">65</td> <td data-bbox="472 522 578 712">70</td> <td data-bbox="578 522 685 712">75</td> <td data-bbox="685 522 791 712">80</td> </tr> </table> </td> </tr> </table>	R 4 7	5	4		10	15	20	25	30	35	40	45	50	<table border="1"> <tr> <td data-bbox="65 522 217 712"></td> <td data-bbox="217 522 259 712">55</td> <td data-bbox="259 522 366 712">60</td> <td data-bbox="366 522 472 712">65</td> <td data-bbox="472 522 578 712">70</td> <td data-bbox="578 522 685 712">75</td> <td data-bbox="685 522 791 712">80</td> </tr> </table>														55	60	65	70	75	80
R 4 7	5	4		10	15	20	25	30	35	40	45	50																					
<table border="1"> <tr> <td data-bbox="65 522 217 712"></td> <td data-bbox="217 522 259 712">55</td> <td data-bbox="259 522 366 712">60</td> <td data-bbox="366 522 472 712">65</td> <td data-bbox="472 522 578 712">70</td> <td data-bbox="578 522 685 712">75</td> <td data-bbox="685 522 791 712">80</td> </tr> </table>														55	60	65	70	75	80														
	55	60	65	70	75	80																											

The ID Code (Positions 1-4) will contain R47 identifying the record as a Rule 47 Indicator record.

Position 6 would contain a "4" denoting that the application was filed under Rule 47. Positions 7-80 would contain spaces.

NOTE: Rule 47 applies when an Inventor is deceased, mentally or otherwise incapacitated, or refuses to execute an application or cannot be found after diligent efforts.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field
			<div><div></div> Required</div> <div><div>x</div> Optional</div>
Inventor Descriptive Text - ITX - (INVT)			
I T X	5	Inventor Description Text	
	10	15	20
	25	30	35
	40	45	50
	55	60	65
	70	75	80

The ID Code (Positions 1-4) will contain ITX identifying the record as an Inventor Descriptive Text record.

Position 6 will begin a variable length alphanumeric field containing the Inventor Descriptive Text. Trailing spaces would terminate the field.

If continuation record(s) are required, positions 6-80 will contain the continuation data. Reference Appendix B - The Appearance of Text.

NOTE: The Inventor Description Text is used in support of inventor information, such as "administrator" of an estate, "in respect to", foreign zip codes, etc.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional																													
Logical Group - ASSG - Assignee Information																																
<table border="1"> <tr> <td>A</td><td>S</td><td>S</td><td>G</td> <td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td>40</td><td>45</td><td>50</td> </tr> <tr> <td colspan="4"></td> <td>55</td><td>60</td><td>65</td><td>70</td><td>75</td><td>80</td> <td colspan="5"></td> </tr> </table>				A	S	S	G	5	10	15	20	25	30	35	40	45	50					55	60	65	70	75	80					
A	S	S	G	5	10	15	20	25	30	35	40	45	50																			
				55	60	65	70	75	80																							

The ID Code (Positions 1-4) will contain ASSG identifying logical group Assignee Information. Positions 5-80 will contain spaces.

The data records within a logical group ASSG will contain name and address information on an Assignee. Multiple Assignee could be present and each assignee would begin a new logical group ASSG. ID Codes and associated data for the ASSG logical group are defined on the following pages.



RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field <u>  x  </u> Required <u>     </u> Optional	
Assignee Name - NAM - (ASSG)															
N A M		Assignee Name													
		5	10	15	20	25	30	35	40	45	50				
		55	60	65	70	75	80								

The ID Code (Positions 1-4) will contain NAM identifying the record as an Assignee Name record.

Position 6 will begin a variable length alphanumeric field containing the name of the assignee. Punctuation would be included in the name, trailing spaces would terminate the field.

If continuation record(s) are required, positions 6-80 will contain the continuation data.  
 Reference Appendix B - The Appearance of Text.

RECORD LAYOUT				Patent Full-Text/APS File																										Logical Group/Field																					
																														<u>    </u> Required	<u>x</u> Optional																				
C T Y				Assignee City Address																																															
				5	10	15	20	25	30	35	40	45	50																																						
				55	60	65	70	75	80																																										

The ID Code (Positions 1-4) will contain CTY identifying the record as an Assignee City Address record.

Position 6 will begin a variable length alphanumeric field containing the Assignee City Address. Trailing spaces would terminate the field.

If continuation record(s) are required, positions 6-80 will contain the continuation data. Reference Appendix B - The Appearance of Text.

RECORD LAYOUT		Patent Full-Text/APS File		Logical Group/Field																																											
				<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional																																											
Assignee State Address - STA - (ASSG)																																															
<table border="1"> <tr> <td>S</td><td>T</td><td>A</td><td>5</td><td>S T A T E</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td>40</td><td>45</td><td>50</td> </tr> <tr> <td colspan="10"></td> <td colspan="4"></td> </tr> <tr> <td colspan="5"></td> <td>55</td><td>60</td><td>65</td><td>70</td><td>75</td><td>80</td><td colspan="3"></td> </tr> </table>						S	T	A	5	S T A T E	10	15	20	25	30	35	40	45	50																				55	60	65	70	75	80			
S	T	A	5	S T A T E	10	15	20	25	30	35	40	45	50																																		
					55	60	65	70	75	80																																					

The ID Code (Positions 1-4) will contain STA identifying the record as an Assignee State Address record.

Positions 6-7 will contain a two-position alphabetic state abbreviation. Reference Table 2, U.S. Post Office Standard State Abbreviations.  
Positions 8-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field  <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Assignee Country Address - CNT - (ASSG)															
C N T		5	COUN- TRY		10	15	20	25	30	35	40	45	50		
					55	60	65	70	75	80					

The ID Code (Positions 1-4) will contain CNT identifying the record as an Assignee Country Address record.

Positions 6-8 will contain an alphabetic country abbreviation as follows: A two-character country abbreviation will appear for all patents issued prior to July 4, 1978. A three-character country abbreviation will appear for all patents issued on or after July 4, 1978. Reference Table 3A International Country Abbreviation - 2-character and Table 3B International Country Abbreviation - 3-character.

RECORD LAYOUT		Patent Full-Text/APS File		Logical Group/Field	
				<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Assignee Zip Code Address - ZIP - (ASSG)					
<div> <div>Z I P</div> <div>5</div> <div>10</div> <div>15</div> <div>20</div> <div>25</div> <div>30</div> <div>35</div> <div>40</div> <div>45</div> <div>50</div> </div>	<div> <div>Zip Code</div> <div>55</div> <div>60</div> <div>65</div> <div>70</div> <div>75</div> <div>80</div> </div>				

51

The ID Code (Positions 1-4) will contain ZIP identifying the record as an Assignee Zip Code Address record.

Positions 6-10 will contain a five-position numeric U.S Postal Zip Code.  
 Positions 11-80 will contain spaces.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field
			<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional
Assignee Type Code - COD (ASSG)			
C O D	5	C O D E	
			10 15 20 25 30 35 40 45 50
			55 60 65 70 75 80

52 The ID Code (Positions 1-4) will contain COD identifying the record as an Assignee Type Code record.

Positions 6-7 will contain a two-position numeric code defining the type of assignment.

02 - To U.S. Company or Corporation	05 - To Foreign Individual	08 - To County Government
03 - To Foreign Company or Corporation	06 - To U.S. Government	09 - To State Government
04 - To U.S. Individual	07 - To Foreign Government	(US)

NOTE: A "1" appearing in the first position would identify part interest.

RECORD LAYOUT		Patent Full-Text/APS File		Logical Group/Field	
				<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Assignee Descriptive Text - ITX - (ASSG)					
I T X 5		Assignee Descriptive Text 10 15 20 25 30 35 40 45 50			
55		60 65 70 75 80			

The ID Code (Positions 1-4) will contain ITX identifying the record as an Assignee Descriptive Text record.

If continuation record(s) are required, positions 6-80 will contain the continuation data. The ID Code (Positions 1-4) will contain spaces in continuation records.

RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field  Required <u>x</u> Optional
Logical Group - PRIR - Foreign Priority		
PRIR		
5 10 15 20 25 30 35 40 45 50		
55 60 65 70 75 80		

54

The ID Code (Positions 1-4) will contain PRIR identifying logical group Foreign Priority. Positions 5-80 will contain spaces.

The data records within logical group PRIR will contain the data indicating in which foreign countries an application was filed. Multiple foreign priorities could be present and each one would begin a new logical group PRIR.

ID Codes and associated data for the PRIR logical group are defined on the following pages.



RECORD LAYOUT		Patent Full-Text/APS File														Logical Group/Field  <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional	
Priority Country - CNT - (PRIR)																	
C N T		COUN-TRY															
5		10 15 20 25 30 35 40 45 50															
55		60 65 70 75 80															

The ID Code (Positions 1-4) will contain CNT identifying the record as a priority country record.

Positions 6-8 will contain an alphabetic country abbreviation as follows: A two-character country abbreviation will appear for all patents issued prior to July 4, 1978. A three-character country abbreviation will appear for all patents issued on or after July 4, 1978. Reference Table 3A International Country Abbreviation - 2-character and Table 3B International Country Abbreviation - 3-character.



RECORD LAYOUT		Patent Full-Text/APS File																Logical Group/Field  <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional	
Priority Application Number - APN - (PRIR)																			
A P N		<div> <div>5</div> <div>10</div> <div>15</div> <div>20</div> <div>25</div> <div>30</div> <div>35</div> <div>40</div> <div>45</div> <div>50</div> </div>																	
		<div> <div>55</div> <div>60</div> <div>65</div> <div>70</div> <div>75</div> <div>80</div> </div>																	

57

The ID Code (Positions 1-4) will contain APN identifying the record as a priority application number record.

Position 6 will begin a variable length alphanumeric field containing a priority application number. A trailing space would terminate the field. The remainder of the record, through position 80, contains spaces.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field
			<div><div></div> Required</div> <div><div>x</div> Optional</div>
Logical Group - REIS - Reissue Information Data			
REIS			
	5	10	15
	20	25	30
	35	40	45
	50		
	55	60	65
	70	75	80

The ID Code (Positions 1-4) will contain REIS identifying logical group Reissue Information Data. Positions 5-80 will contain spaces.

The data records within logical group REIS will contain the data describing the reissue of a patent. Multiple reissue information data could be present and each one would begin a new logical group REIS.

ID Codes and associated data for REIS logical group are defined on the following pages.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field	
												<input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional	
Reissue Code - COD - (REIS)													
C O D		5	R E I S S U E	10	15	20	25	30	35	40	45	50	
		55		60	65	70	75	80					

The ID Code (Positions 1-4) will contain COD identifying the record as a reissue code record.

Positions 6-7 will contain a two-position numeric reissue code as defined below:

#### REISSUE CODES

<u>Reissue Codes</u>	<u>Condition</u>	<u>Publication Level</u>
50	Reissue of	First Reissue (Second Publication)
51	Which is a Reissue of	Second Reissue (Third Publication)
52	Which is a Reissue of	Third Reissue (Fourth Publication)

Positions 8-80 will contain spaces.



RECORD LAYOUT		Patent Full-Text/APS File																												Logical Group/Field  x Required Optional	
Application Filing Date - APD - (REIS)																															
A P D		5	Application Filing Date		10	15	20	25	30	35	40	45	50																		
										55	60	65	70	75	80																

19

The ID Code (Positions 1-4) will contain APD identifying the record as an application filing date record.

Positions 6-13 will contain an eight-position numeric application date in the format  
YYYYMMDD

Positions 14-80 will contain spaces





RECORD LAYOUT		Patent Full-Text/APS File																												Logical Group/Field  <u>  x  </u> Required <u>    </u> Optional	
Issue Date - ISD - (REIS)																															
I S D		5	Issue Date																												
			10		15		20		25		30		35		40		45		50												
		55		60		65		70		75		80																			

The ID Code (Positions 1-4) will contain ISD identifying the record as an issue date record.

Positions 6-13 will contain an eight-position numeric issue date in the format YYYYMMDD.  
Positions 14-80 will contain spaces.



RECORD LAYOUT		Patent Full-Text/APS File		Logical Group/Field							
				<input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional							
Parent Code - COD - (RLAP)											
C O D	P A R C E D N D T E	5	10	15	20	25	30	35	40	45	50
		55	60	65	70	75	80				

65

The ID Code (Positions 1-4) will contain COD identifying the record as a parent code record.

Positions 6-7 will contain a two-position numeric parent code as defined below:

Parent Code and Definitions

- 71 Continuation of (including streamline cont.)
- 72 Continuation-in-part of
- 73 A substitute for
- 74 Division of
- 81 Which is a continuation of
- 82 Which is a continuation-in-part of
- 84 Which is a division of
- 86 , said
- 89 Ser. No.
- 90 And
- 91 And a continuation of
- 92 , each

Patent Full-Text/APS File

Parent Code - COD - (RLAP) (continued)

Note: When the codes 86 and 92 are used, they must be followed by a code in the 80 series (81, 82, or 84); the conditions beginning with "which is ...", the work "which" is automatically dropped.

All codes 71-92 automatically generate "Ser. No.".

|  
|  
|

RECORD LAYOUT			Patent Full-Text/APS File																																	Logical Group/Field  <u>  x  </u> Required <u>    </u> Optional																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Application Number - APN - (RLAP)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
A P N			5	Application Number																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

The ID Code (Positions 1-4) will contain APN identifying the record as an application number record.

Positions 6-11 will contain a six-position numeric application number.  
Positions 13-80 will contain spaces.









RECORD LAYOUT		Patent Full-Text/APS File																														Logical Group/Field  Required <u>x</u> Optional	
Issue Date - ISD - (RLAP)																																	
I S D		5	Issue Date																														
			10		15		20		25		30		35		40		45		50														
			55		60		65		70		75		80																				

71

The ID Code (Positions 1-4) will contain ISD identifying the record as an issue date record.

Positions 6-13 will contain an eight-position numeric issue date in the format YYYYMMDD.

Positions 14-80 will contain spaces.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional							
Logical Group - CLAS - Classification										
C L A S	5	10	15	20	25	30	35	40	45	50
	55	60	65	70	75	80				

The ID Code (Positions 1-4) will contain CLAS identifying logical group Classification.  
Positions 5-80 will contain spaces.

The data records within logical group CLAS will contain the U.S. and International Classifications.

ID Codes and associated data for the CLAS logical group are defined on the following pages.



RECORD LAYOUT			Patent Full-Text/APS File																																				Logical Group/Field <div><div></div> Required</div> <div><div>x</div> Optional</div>	
Cross Reference to U.S Classification - XCL - (CLAS)																																								
X	C	L	5	Cross Reference Classification																																				
				10	15	20	25	30	35	40	45	50																												
				55	60	65	70	75	80																															

The ID Code (Position 1-4) will contain XCL identifying the record as a Cross Reference to the U.S. Classification record.

Position 6 will begin a variable length alphanumeric field appearing as defined for an OCL record.

NOTE: More than one XCL record may appear within logical group CLAS.







RECORD LAYOUT		Patent Full-Text/APS File														Logical Group/Field  <div><div>Required</div><div><input checked="" type="checkbox"/> Optional</div></div>															
International Classification - ICL - (CLAS)																															
International Classification																															
I	C	L	5	10	15	20	25	30	35	40	45	50																			
																55	60	65	70	75	80										

The ID Code (Positions 1-4) will contain ICL identifying the record as an International Classification record.

Position 6 will begin a variable length alphanumeric field appearing as follows:

- position 1 - Section - 1 character alphabetic.
- position 2-3 - Class - 2 character numeric.
- position 4 - Subclass - 1 character alphabetic.
- position 5-7 - Group - 3 character numeric, right justified, leading zeros.
- position 8-14 - Subgroup - Maximum of 7 characters alphanumeric (including punctuation).

The International Classification for Designs will appear in the following manner:

- position 1 - Section - 1 character alphabetic containing a "D".
- position 2-3 - Class - 2 character numeric, right justified, with a leading zero when required for a single digit class.
- position 4-5 - Subclass - 2 character numeric, right justified, with a leading zero when required for a single digit class.

The remainder of the record, through position 80, contains spaces.

NOTE: Effective with the 03/13/84 issue Design patents will no longer have an International Classification (ICL).

More than one ICL record may appear within logical group CLAS.



RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field  <div> <div>Required</div> <div><input checked="" type="checkbox"/> Optional</div> </div>							
Field of Search Class - FSC - (CLAS)										
F S C	5	10	15	20	25	30	35	40	45	50
	55	60	65	70	75	80				

The ID Code (Positions 1-4) will contain FSC identifying the record as a field of search classification record.



Patent Full-Text/APS File

Field of Search Subclass - FSS - (CLAS) (continued)

Examples of FSS records - (¶ = one space character):

Example #1 shows one subclass.

FSS 136¶¶

Example #2 shows two records each having multiple subclasses

FSS 91;92¶¶

FSS 217;238;258¶¶

Example #3 shows three records each having multiple subclasses. Each record also includes a subclass with decimal subclass data.

FSS 25;30;63.5¶¶

FSS 505.26;495¶¶

FSS 30;63.5;76;174¶¶

Example #4 shows one subclass record with the decimal subclass containing an alpha character. Note that a single space precedes the alpha character.

FSS 39.14¶M¶¶

Example #5 shows a subclass record having multiple subclasses including Digest (DIG.) entries

FSS 183;300;DIG.¶30;DIG.¶31¶¶

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field							
			<input type="checkbox"/> Required	<input checked="" type="checkbox"/> Optional						
Logical Group - UREF - U.S. Patent Reference										
U R E F	5	10	15	20	25	30	35	40	45	50
	55	60	65	70	75	80				

The ID Code (Positions 1-4) will contain UREF identifying logical group U.S. Patent Reference. Positions 5-80 will contain spaces.

The data records within logical group UREF will contain the U.S. Patent Reference(s) that are being cited.

ID Codes and associated data for the UREF logical group are defined on the following pages.

RECORD LAYOUT		Patent Full-Text/APS File	Logical Group/Field
			<u>  x  </u> Required _____ Optional
Patent Number - PNO - (UREF)			
P N O	Patent Number		
5	10	15	20
25	30	35	40
45	50		
55	60	65	70
75	80		

The ID Code (Positions 1-4) will contain PNO identifying the record as a patent number record.

Postion 6 will begin a variable length alphanumeric patent number. A trailing space would terminate the field. The remainder of the record, through position 80, contains spaces.

RECORD LAYOUT		Patent Full-Text/APS File																		Logical Group/Field  <u>  x  </u> Required <u>    </u> Optional	
Issue Date - ISD - (UREF)																					
I S D		Issue Date																			
5		10		15		20		25		30		35		40		45		50			
55		60		65		70		75		80											

The ID Code (Positions 1-4) will contain ISD identifying the record as an issue date record.

Positions 6-13 will contain an eight-position numeric issue date in the format YYYYMMDD.

NOTE: The Day (DD) in positions 12-13 will contain zeros

Positions 14-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field <u>  x  </u> Required <u>     </u> Optional							
Patentee Name - NAM - (UREF)																			
N A M		Patentee Name																	
5		10		15		20		25		30		35		40		45		50	
55		60		65		70		75		80									

The ID Code (Positions 1-4) will contain NAM identifying the record as a patentee name record.

Position 6 will begin a variable length alphabetic field containing the last name of the patentee. If more than one patentee exists, "et al" will follow the first patentee name. Two spaces would terminate the field.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field  <div><div></div> Required</div> <div><div>x</div> Optional</div>							
Original U.S. Classification - OCL - (UREF)																			
O C L		Original US Classification																	
5		10		15		20		25		30		35		40		45		50	
55		60		65		70		75		80									

The ID Code (Positions 1-4) will contain OCL identifying the record as an original U.S. Classification records.

Position 6 will begin a variable length alphanumeric field appearing as defined below:

- Class - DESIGNS will contain a "D" in the first position. Positions two and three, right justified, with a leading space when required for a single digit class.

**PLANTS** - Three alphabetic characters containing "PLT"

**ALL OTHER PATENTS - Three alphanumeric positions, right justified, with leading spaces.**

- Sub-Class - ALL PATENTS - Three alphanumeric positions, right justified, leading spaces, and, if present, one to there alphanumeric characters to the right of the decimal point (assumed decimal point on-full-text), left justified.



RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field	
												<input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional	
Cross Reference to U.S. Classification - XCL - (UREF)													
X C L		Cross Reference Classification											
		5	10	15	20	25	30	35	40	45	50		
		55	60	65	70	75	80						

The ID Code (Positions 1-4) will contain XCL identifying the record as a Cross Reference.

Position 6 will begin a variable length alphanumeric field appearing as defined for an OCL record.



RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field  Required <u>x</u> Optional
Logical Group - FREF - Foreign Reference		
F R E F	<div> <div>5101520253035404550</div> </div>	
	<div> <div>556065707580</div> </div>	

The ID Code (Positions 1-4) will contain FREF identifying logical group Foreign Reference. Positions 5-80 will contain spaces.

The data records within logical group FREF will contain the foreign patent(s) cited as reference(s).

ID Codes and associated data for the FREF logical group are defined on the following pages.



RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field  <u>  x  </u> Required <u>      </u> Optional					
Issue Date - ISD - (FREF)																			
I S D		Issue Date																	
5		10		15		20		25		30		35		40		45		50	

The ID Code (Positions 1-4) will contain ISD identifying the record as an issue date record.

Positions 6-13 will contain an eight-position numeric issue date in the format YYYYMMDD.

NOTE: The Day (DD) in positions 12-13 will contain zeros

Positions 14-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field  <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional	
Foreign Reference Country Code - CNT - (FREF)													
C N T		COUN- TRY											
5		10	15	20	25	30	35	40	45	50			
55		60	65	70	75	80							

The ID Code (Positions 1-4) will contain CNT identifying the record as a Foreign Reference Country Code record.

Positions 6-8 will contain an alphabetic country abbreviation as follows: A two-character country abbreviation will appear for all patents issued prior to July 4, 1978. A three-character country abbreviation will appear for all patents issued on or after July 4, 1978. Reference Table 3A International Country Abbreviation - 2-character and Table 3B International Country Abbreviation - 3-character.



RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field
		<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional
Logical Group - OREF - Other Reference		
O R E F	<div> <div>5101520253035404550</div> </div>	
	<div> <div>556065707580</div> </div>	

The ID Code (Positions 1-4) will contain OREF identifying logical group Other References. Positions 5-80 will contain spaces.

The data records within logical group OREF will contain Other References that are being cited.

Other References - Such as books, pamphlets, trade journals, pages from catalogues, etc., includes name of publication and article (if appropriate), edition and year, volume and issue, publisher, and pertinent pages if less than the entire publication is being relied on. If abstracts, such as Chemical Abstracts, are cited, the name of the abstracting company will also be given. Defensive Publications are cited under this category and are identified with "Def. Pub." before the number (which is preceded by a "T", indicating technical disclosure document, for those published after 12/16/69).

Each Other Reference cited within logical group OREF will begin with PAL as the ID Code (Positions 1-4).

NOTE: PAL defines a new paragraph all lines being left justified on the printed document. Refer to Appendix A Definition of Paragraph ID Codes and Appendix B Appearance of Text



Patent Full-Text/APS File

Logical Group - OREF - Other Reference (continued)

Example of Other Reference  
appearing on APS File:

REF

- AL Norman Abramson; *Information Theory and Coding*, 1963, McGraw-Hill, pp. 34, 35.
- AL Robert Parkinson; "The Dvorak Simplified Keyboard: Forty Years of Frustration," *Computers and Automation*, Nov. 1972, pp. 18-25.
- AL Rochester, Bequaert and Sharp, "The Chord Keyboard", *Computer*; (IEEE) vol. 11, No. 12, Dec. 1978, pp. 57-63.

Example of Other Reference  
appearing on printed document:

OTHER PUBLICATIONS

Norman Abramson; *Information Theory and Coding*, 1963, McGraw-Hill, pp. 34, 35.  
Robert Parkinson; "The Dvorak Simplified Keyboard: Forty Years of Frustration," *Computers and Automation*, Nov. 1972, pp. 18-25.  
Rochester, Bequaert and Sharp, "The Chord Keyboard", *Computer*; (IEEE) vol. 11, No. 12, Dec. 1978, pp. 57-63.

NOTE: The two examples are from the same patent.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field <input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional							
Logical Group - LREP - Legal Information										
L R E P	5	10	15	20	25	30	35	40	45	50
	55	60	65	70	75	80				

The ID Code (Positions 1-4) will contain LREP identifying logical group Legal Information. Positions 5-80 will contain spaces.

The data records within logical group LREP will describe the attorney, agent, firm or legal representative representing an applicants patent.

ID Codes and associated data for the FREF logical group are defined on the following pages.

Only one of the following Legal Information types will be present for logical group LREP

TYPE

FRM  
 FR2  
 AGT  
 AAT  
 ATT  
 NAM & Address

RECORD LAYOUT		Patent Full-Text/APS File		Logical Group/Field	
				<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Legal Firm - FRM - (LREP)					
F R M		Firm Name			
5		10		15	
20		25		30	
35		40		45	
50		55		60	
65		70		75	
80					

The ID Code (Positions 1-4) will contain FRM identifying the record as a Legal Firm record.

Positions 6-80 will contain a variable length alphanumeric firm's name, left justified with trailing spaces.

If continuation record(s) are required, positions 6-80 will contain the continuation data. The ID Code (Positions 1-4) will contain spaces in continuation records.

NOTE: Only one FRM record will be present for Legal Information (LREP).

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field
Combined Principal Attorney(s) - FR2 - (LREP)		<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
F R 2	Attorney's Name <div style="display: flex; justify-content: space-between; padding: 0 10px;"> <span>5</span><span>10</span><span>15</span><span>20</span><span>25</span><span>30</span><span>35</span><span>40</span><span>45</span><span>50</span> </div> <div style="display: flex; justify-content: space-between; padding: 0 10px; margin-top: 20px;"> <span>55</span><span>60</span><span>65</span><span>70</span><span>75</span><span>80</span> </div>		

The ID Code (Positions 1-4) will contain FR2 identifying the record as a Principal Attorney record.

Position 6 will begin a variable length alphanumeric field containing the Attorney Name. Trailing spaces would terminate the field.

The appearance of an attorney's name will be the same as defined for Inventor's Name.

If continuation record(s) are required, positions 6-80 will contain the continuation data. The ID Code (Positions 1-4) will contain spaces in continuation records.

NOTE: A maximum of three names (3 FR2 records) can be present for the Legal Information LREP.

RECORD LAYOUT		Patent Full-Text/APS File		Logical Group/Field	
				<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional	
Associate Attorney - AAT - (LREP)					
A A T		Associate Attorney's Name			
5		10 15 20 25 30 35 40 45 50			
55 60 65 70 75 80					

The ID Code (Positions 1-4) will contain AAT identifying the record as an Associate Attorney record.

Position 6 will begin a variable length alphanumeric field containing the Associate Attorney's Name. Trailing spaces would terminate the field.

The appearance of an Associate Attorney's Name will be the same as defined for Inventor's Name

If continuation record(s) are required, positions 6-80 will contain the continuation data. Reference Appendix B - The Appearance of Text.

NOTE: Only one AAT record will be present for Legal Information (LREP).



RECORD LAYOUT		Patent Full-Text/APS Files										Logical Group/Field							
												<div><div></div> Required</div> <div><div>x</div> Optional</div>							
Attorney Name - ATT - (LREP)																			
A T T		Attorney Name																	
5		10		15		20		25		30		35		40		45		50	
55		60		65		70		75		80									

The ID Code (Positions 1-4) will contain ATT identify the record as an Attorney Name record.

Position 6 will begin a variable length alphanumeric field containing the Attorney's Name. Trailing spaces would terminate the field.

The appearance of Attorney's Name will be the same as defined for Inventor's Name.

If continuation record(s) are required, positions 6-80 will contain continuation data.  
Reference Appendix B - The Appearance of Text

NOTE: An ATT record will be present for each Attorney Name in Legal Information (LREP).

RECORD LAYOUT			Patent Full-Text/APS Files																														Logical Group/Field  <div><div><div></div></div> Required</div> <div><div>x</div> Optional</div>																									
Registration Number - REG - (LREP)																																																										
R E G			5		10		15		20		25		30		35		40		45		50																																					
																														55			60			65			70			75			80													

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The ID Code (Positions 1-4) will contain REG identifying this as a Registration Number record.

Positions 6-10 will contain a five-position registration number.

Positions 11-80 will contain spaces.

NOTE: A REG record will only be associated with an ATT record.





RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field  Required <u>x</u> Optional	
Legal Representative Street - STR - (LREP)															
S	T	R	5	Legal Representative Street Address											
				10	15	20	25	30	35	40	45	50			
				55	60	65	70	75	80						

The ID Code (Positions 1-4) will contain STR identifying the record as a Legal Representative Street Address record.

Position 6 will begin a variable length alphanumeric field containing the street address of the legal representative. Trailing spaces would terminate the field. The remainder of the records, through position 80, contains spaces.

RECORD LAYOUT		Patent Full-Text/APS File																				Logical Group/Field	
																						<u>    </u> Required	
																						<u>  x  </u> Optional	
Legal Representative City - CTY - (LREP)																							
C T Y		Legal Representative City Address																					
5		10		15		20		25		30		35		40		45		50					

The ID Code (Positions 1-4) will contain CTY identifying the record as a Legal Representative City Address record.

Position 6 will begin a variable length alphanumeric field containing the city, address of the legal representative. Trailing spaces would terminate the field. The remainder of the records, through position 80, contains spaces.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field
Legal Representative State Address - STA - (LREP)			<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional
S T A	5	S T A T E	<div> <div>101520253035404550</div> </div>
<div> <div>556065707580</div> </div>			

The ID Code (Positions 1-4) will contain STA identifying the record as a Legal Representative State Address record.

- Positions 6-7 will contain a two-position alphabetic state abbreviation. Reference Table 2, U.S. Post Office Standard State Abbreviation.
- Positions 8-80 will contain spaces.



RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field					
														<u>    </u> Required <u>  x  </u> Optional					
Legal Representative Zip Code Address - ZIP - (LREP)																			
Z I P		Zip Code																	
5		10		15		20		25		30		35		40		45		50	
55		60		65		70		75		80									

The ID Code (Positions 1-4) will contain ZIP identifying the record as an Assignee Zip Code Address record.

Positions 6-10 will contain a five-position numeric U.S. Postal Zip Code.  
Positions 11-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File	Logical Group/Field
			<input type="checkbox"/> Required <input checked="" type="checkbox"/> Optional
Logical Group - PCTA - PCT Information			
P C T A	5	10	15
	20	25	30
	35	40	45
	50	55	60
	65	70	75
	80		

The ID Code (Positions 1-4) will contain PCTA identifying logical group PCT Information. Positions 5-80 will contain spaces.

The data records with the logical group PCTA will contain information for patents issued under the Patent Cooperation Treaty (PCT) beginning with the issue of April 1, 1980.

**ID codes and associated data for the PCTA logical group are defined on the following pages.**

RECORD LAYOUT		Patent Full-Text/APS File														Logical Group/Field <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional			
PCT Number - PCN - (PCTA)																			
P C N		PCT Number																	
5		10		15		20		25		30		35		40		45		50	
55		60		65		70		75		80									

The ID Code (Positions 1-4) will contain PCN identifying the record as a PCT Number record.

Positions 6-19 will contain a fourteen-position alphanumeric PCT Number.

Positions 20-80 will contain spaces.



RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional
PCT 371 Date - PD1 - (PCTA)			
P D 1	PCT 371 Date		
5	10	15	20
25	30	35	40
45	50		
55	60	65	70
75	80		

The ID Code (Positions 1-4) will contain PD1 identifying the record as a PCT 371 Date record.

Positions 6-13 will contain an eight-position numeric date in the format YYYYMMDD.

Positions 14-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File																Logical Group/Field									
																		<div>— Required</div> <div>— Optional</div>									
PCT 1 2(e) Date - PD2 - (PCTA)																											
P D 2		PCT 102(e) Date																									
5		10		15		20		25		30		35		40		45		50									

The ID Code (Positions 1-4) will contain PD2 identifying the record as a PCT 102(e) Date record.

Positions 6-13 will contain an eight-position numeric date in the format YYYYMMDD.

Positions 14-80 will contain spaces.

RECORD LAYOUT		Patent Full-Text/APS File												Logical Group/Field  <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional					
PCT Filing Date - PD3 - (PCTA)																			
P D 3		PCT Filing Date																	
5		10		15		20		25		30		35		40		45		50	
55		60		65		70		75		80									

The ID Code (Positions 1-4) will contain PD3 identifying the record as a PCT Filing Date record.

Positions 6-13 will contain an eight-position numeric date in the format YYYYDDMM.

Positions 14-80 will contain spaces.





RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field  <input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional							
Logical Group - ABST - Abstract										
A B S T	5	10	15	20	25	30	35	40	45	50
	55	60	65	70	75	80				

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The ID Code (Positions 1-4) will contain ABST identifying logical group Abstract. Positions 5-80 will contain spaces. The data records within logical group ABST will contain the text of the Abstract. The text will be presented as paragraph(s).

- Reference Appendix A - Definition of Paragraph ID Codes.
- Reference Appendix B - The Appearance of Text.
- Reference Appendix C - Special Characters.
- Reference Appendix D - Example of Patent Documents as they appear in machine-readable form.

NOTE: Design Patents do not have a logical group ABST.

The following example shows logical group ABST containing one paragraph consisting of fifteen data records:

:ABST

PAL A novel acute care cerebral support system and method for treating severely ischemic brains is disclosed wherein an oxygenated nutrient emulsion is circulated through at least a portion of the ventriculo-subarachnoid spaces. The nutrient emulsion contains an oxygenatable non-aqueous component, an aqueous nutrient component, an emulsification component, and other components which render physiologic acceptability to the nutrient emulsion. The disclosed system and method have been shown to effectively exchange oxygen, carbon dioxide, glucose, and other metabolites in severely stroked brains. Significant restoration of oxidative metabolism and electrographic activity result from the disclosed treatment. Methods for producing the nutrient emulsion and a system for delivering that emulsion to the cerebrospinal pathway are also disclosed. Additionally, novel diagnostic methods for determining the physiologic state of hypoxic-ischemic and other diseased neurologic tissue during treatment are provided.



RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field  Required <u>x</u> Optional
Logical Group - PARN - Parent Case Text		
P A R N	<div>5 10 15 20 25 30</div>	<div>35 40 45 50</div>
	<div>55 60 65 70 75 80</div>	

The ID Code (Positions 1-4) will contain PARN identifying logical group Parent Case Text. Positions 5-80 will contain spaces. The data records within logical group PARN will contain the text of the Parent Case. The text will be presented as paragraph(s).

Reference Appendix A - Definition of Paragraph ID Codes.

Reference Appendix B - The Appearance of Text.

Reference Appendix C - Special Characters.

Reference Appendix D - Example of Patent Documents as they appear in machine-readable form.

The following example shows logical group PARN containing one paragraph consisting of two data records:

PARN  
 PAR This is a continuation, of application Ser. No. 713,768 filed Aug. 12, 1976, now abandoned.





RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field  Required <u>x</u> Optional.							
Logical Group - DRWD - Drawing Description										
D R W D										
	5	10	15	20	25	30	35	40	45	50
	55	60	65	70	75	80				

The ID Code (Positions 1-4) will contain DRWD identifying logical group Drawing Description. Positions 5-80 will contain spaces. The data records within logical group DRWD will contain the text describing the drawing. The text will be presented as paragraph(s).

Reference Appendix A - Definition of Paragraph ID Codes.

Reference Appendix B - The Appearance of Text.

Reference Appendix C - Special Characters.

Reference Appendix D - Example of Patent Documents as they appear in machine-readable form.

The following example shows logical group DRWD containing eight paragraphs consisting of sixteen records.

```

DRWD
PAC BRIEF DESCRIPTION OF THE DRAWINGS
PAR The accompanying drawings illustrate the invention. In such drawings:
PAR FIG. 1 is a schematic diagram illustrating a pneumatic starting system for
    a gas turbine machine, and including a pressure regulator system of this
    invention;
PAR FIG. 2 is a vertical section of a pressure reduction regulator for use in
    the regulator system;
PAR FIG. 3 is an enlarged fragmented view of the reduction regulator of FIG. 2,
    showing the regulator in a position closed to fluid flow;
PAR FIG. 4 is an enlarged fragmented view similar to FIG. 3, showing the
    reduction regulator in a position open to fluid flow;
PAR FIG. 5 is an enlarged fragmented view similar to FIGS. 3 and 4, partially
    exploded, illustrating the interfitting components of the reduction
    regulator valve seat; and
PAR FIG. 6 is a vertical section, partially fragmented, of an improved solenoid
    valve assembly for use in the system.
  
```

RECORD LAYOUT	Patent Full-Text/APS File	Logical Group/Field  Required <u>x</u> Optional
Logical Group - DETD - Detail Description		
DETD		
	5 10 15 20 25 30 35 40 45 50	
	55 60 65 70 75 80	

The ID Code (Positions 1-4) will contain DETD identifying logical group Detail Description. Positions 5-80 will contain spaces. The data records within logical group DETD will contain the the detailed technical specification of the patent. The text will be presented as paragraph(s).

Reference Appendix A - Definition of Paragraph ID Codes.

Reference Appendix B - The Appearance of Text Data.

Reference Appendix C - Special Characters.

Reference Appendix D - Example of Patent Documents as they appear in machine-readable form.

Reference D shows many DETD examples.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field
Logical Group - CLMS - Claims			<input checked="" type="checkbox"/> Required <input type="checkbox"/> Optional
C L M S	<div> <div>5101520253035404550</div> </div>		
<div> <div>556065707580</div> </div>			

The ID Code (Positions 1-4) will contain CLMS identifying logical group Claims. Positions (5-80) will contain spaces.

ID Codes and associated data for the CLMS logical group are defined on the following pages.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field Required <u>x</u> Optional
Claim Statement - STM - (CLMS)			
S T M	<div> <div>5101520253035404550</div> </div>		
<div> <div>556065707580</div> </div>			

The ID Code (Positions 1-4) will contain STM identifying the record as a claim statement record.

RECORD LAYOUT		Patent Full-Text/APS File										Logical Group/Field  — Required — Optional	
Claim Number - NUM - (CLMS)													
NUM		Claim Number											
		5	10	15	20	25	30	35	40	45	50		
		55	60	65	70	75	80						

The ID Code (Positions 1-4) will contain NUM identifying the record as a claim number record.

Position 6 will begin a variable length numeric field containing the number of the claim that follows. The remainder of the record, through position 80, contains spaces.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field — Required — Optional
Claims Text Data - (CLMS)			
	Claims Text		
	5	10	15
	20	25	30
	35	40	45
	50		
	55	60	65
	70	75	80

The ID Code (Positions 1-4) will contain the appropriate paragraph ID Code to begin a paragraph of text data. Reference Appendix A - Definition of Paragraph ID Codes.

The text of the claim will begin in position 6 as a variable length alphanumeric field. If continuation record(s) are required, positions 6-80 will contain the continuation data. Reference Appendix B - The Appearance of Text.

Reference Appendix C - Special Characters.

Reference Appendix D - Example of Patent Documents as they appear in machine-readable form.

RECORD LAYOUT	Patent Full-Text/APS File		Logical Group/Field <u>  x  </u> Required <u>     </u> Optional							
Logical Group - DCLM - Design Claim										
D C L M	5	10	15	20	25	30	35	40	45	50
	55	60	65	70	75	80				

The ID Code (Positions 1-4) will contain DCLM identifying logical group Design Claim. Positions 5-80 will contain spaces. The data records within logical group DCLM will contain the text of the design claim. The text will be presented as paragraph(s).

Reference Appendix A - Definition of Paragraph ID Codes.

Reference Appendix B - The Appearance of Text.

Reference Appendix C - Special Characters.

Reference Appendix D - Example of Patent Documents as they appear in machine-readable form.

The following example shows logical group DCLM containing one paragraph consisting of two records.

NOTE: A design claim will only be present in a design patent.



ANSI-STANDARD-LABEL (EOV)

First End-of-Volume Label (EOV1)

CP	Field Name	L	Content
1 to 3	Label Identifier	3	EOV
4	Label Number	1	1
5 to 54	Same as the corresponding fields in HDR1	50	Same as the corresponding fields in HDR1
55 to 60	Block Count	6	"n" characters. Denotes the number of data blocks since the preceding Beginning-of-File-Section Label Group.
61 to 80	Same as the corresponding fields in HDR1	20	Same as the corresponding fields in HDR1

Second End-of-Volume Label (EOV2)

CP	Field Name	L	Content
1 to 3	Label Identifier	3	EOV
4	Label Number	1	2
5 to 80	Same as the corresponding fields in HDR2	76	Same as the corresponding fields in HDR2

11-75-10 U.S. DEPT. OF COMMERCE (V. 11-76) (FORMERLY PTO-1053)				
NSI-STANDARD-LABEL (EOF1)				

First End-of-File Label (EOF1)

CP	Field Name	L	Content
1 to 3	Label Identifier	3	EOF
4	Label Number	1	1
5 to 54	Same as the corresponding fields in HDR1	50	Same as the corresponding fields in HDR1
55 to 60	Block Count	6	"n" characters. Denotes the number of data blocks since the preceding Beginning-of-File-Section Label Group.
61 to 80	Same as the corresponding fields in HDR1	20	Same as the corresponding fields in HDR1

FORM TTY075-10 U.S. DEPT. OF COMMERCE (REV. 11-76) (FORMERLY PTO-1053)				
ANSI-STANDARD-LABEL (EOF2)				

Second End-of-File Label (EOF2)

CP	Field Name	L	Content
1 to 3	Label Identifier	3	EOF
4	Label Number	1	2
5 to 80	Same as the corresponding fields in HDR2	76	Same as the corresponding fields in HDR2

Table 1

Check Digit Modulus 11

A check digit is established for each patent number and application serial number that appears on the full-text file. The patent number check digit will appear in the 9th position of each record following the patent number. The check digit for the application serial number will appear in the 8th position of the Selected Front Page Information element. The check digit is derived in the following manner:

Multiply the right most numeric position of the field by 2, the next numeric position to the left by 3, the next by 4, the next by 5, etc.

The products are added and divided by 11. The resulting remainder is subtracted from 11, which produces the check digit. The exception will be if the result is 11, the check digit will be 0, if the result is 10, the check digit will appear as an ampersand (&).

TABLE 2  
U.S. POST OFFICE STANDARD STATE ABBREVIATIONS

ALASKA	AK	MONTANA	MT
ALABAMA	AL	NEBRASKA	NE
ARKANSAS	AR	NORTH CAROLINA	NC
ARIZONA	AZ	NORTH DAKOTA	ND
CALIFORNIA	CA	NEW HAMPSHIRE	NH
COLORADO	CO	NEW JERSEY	NJ
CONNECTICUT	CT	NEW MEXICO	NM
CANAL ZONE	CZ	NEW YORK	NY
DISTRICT OF COLUMBIA	DC	NEVADA	NV
DELAWARE	DE	OHIO	OH
FLORIDA	FL	OKLAHOMA	OK
GEORGIA	GA	OREGON	OR
HAWAII	HI	PENNSYLVANIA	PA
IOWA	IA	PUERTO RICO	PR
IDAHO	ID	RHODE ISLAND	RI
ILLINOIS	IL	SOUTH CAROLINA	SC
INDIANA	IN	SOUTH DAKOTA	SD
KANSAS	KS	TENNESSEE	TN
KENTUCKY	KY	TEXAS	TX
LOUISIANA	LA	UTAH	UT
MASSACHUSETTS	MA	VIRGINIA	VA
MARYLAND	MD	VIRGIN ISLANDS	VI
MAINE	ME	VERMONT	VT
MICHIGAN	MI	WASHINGTON	WA
MINNESOTA	MN	WISCONSIN	WI
MISSOURI	MO	WEST VIRGINIA	WV
MISSISSIPPI	MS	WYOMING	WY

NOTE: The state abbreviation for Nebraska prior to July 4, 1978 is NB.

Table 3A International Country Abbreviations  
(2-Character)

Afganistan	AF	Finland	SF
Albania	AN	France	FR
Algeria	AG		
Andorra	AD	Gabon	GA
Argentina	AR	Gambia	GE
Australia	AU	German Democratic Republic	DL
Austria	OE	Germany, Federal Republic of	DT
		Ghana	GH
Bahrain	BB	Greece	GR
Barbados	BD	Guatemala	GU
Belgium	BE	Guinea	GI
Bhutan	BH	Guyana	GY
Bolivia	BO		
Botswana	BT	Haiti	HI
Brazil	BR	Holy See	CV
Bulgaria	BG	Honduras	HO
Burma	BU	Hungary	HU
Burundi	BI		
Byelorussian SSR	SB	Iceland	IS
		India	IN
Cameroon	KA	Indonesia	ID
Canada	CA	Iran	IR
Central African Republic	ZR	Iraq	IQ
Chad	TS	Ireland	IE
Chile	CE	Israel	IL
China	RC	Italy	IT
Colombia	CO	Ivory Coast	CI
Congo	CF		
Costa Rica	CR	Jamaica	JM
Cuba	CU	Japan	JA
Cyprus	CY	Jordan	JO
Czechoslovakia	CS		
		Kenya	KE
Dahomey	DA	Khmer Republic	CD
Democratic Republic of Viet-Nam	VN	Kuwait	KU
Democratic Yemen	SY		
Denmark	DK	Laos	LA
Dominican Republic	DR	Lebanon	LB
		Lesotho	LS
Ecuador	EC	Liberia	LR
Egypt	ET	Libyan Arab Republic	LY
El Salvador	SL	Liechtenstein	FL
Ethiopia	EA	Luxembourg	LU

Table 3A - (continued)

Madagascar	MD	San Marino	SM
Malawi	MW	Saudi Arabia	SA
Malaysia	MY	Senegal	SN
Maldives	MV	Sierra Leone	WL
Mali	MJ	Singapore	SG
Malta	ML	Somalia	SO
Mauritania	MT	South Africa	ZA
Mauritius	MS	Soviet Union	SU
Mexico	MX	Spain	ES
Monaco	MC	Sri Lanka	CL
Mongolia	MO	Sudan	SD
Morocco	MA	Sweden	SW
		Switzerland	CH
Neopal	NP	Syrian Arab Republic	SR
Netherlands	NL		
New Zealand	NZ	Thailand	TH
Nicaragua	NA	Togo	TO
Niger	NI	Trinidad and Tobago	TD
Nigeria	WN	Tunisia	TN
Norway	NO	Turkey	TR
Oman	OM	Uganda	UG
		Ukranian SSR	UU
Pakistan	PK	United Kingdom	GB
Panama	PM	United Republic	
Paraguay	PG	of Tanzania	TA
People's Democratic		United States of America	US
Republic of Korea	KN	Upper Volta	UV
Peru	PE	Uruguay	UY
Philippines	RP		
Poland	PO	Venezuela	VE
Portugal	PT		
		Western Samoa	WS
Qatar	QA		
		Yemen	YE
Republic of China	CT	Yugoslavia	YU
Republic of Korea	KS		
Republic of Viet-Nam	VS	Zaire	CB
Rhodesia	RH	Zambia	ZB
Romania	RU		
Rwanda	RW		

TABLE 3B

INTERNATIONAL COUNTRY ABBREVIATIONS  
(3-Characters)

ICIREPAT COUNTRY CODES  
AND CODES FOR U.S. AGENCIES

The following are two complete lists of ICIREPAT country codes; country codes to be used for international organizations in the field of industrial property, as well as the country codes to be used or international agreements (such as Benelux, Hague, and Libre ille); and a list of codes to be used in the data base to generate the names of certain U.S. Government agencies.

The first list, entitled, "ICIREPAT Country Codes - Alphabetized by Country Name," includes the names of the countries as they are to appear on the printed patent front page.

The second list, entitled, "Country Names - Alphabetized by Country Codes," presents an alphabetical listing by country code.

The third list indicates which country codes to use for international organizations in the field of industrial property, as well as those codes which are applicable for international agreements, such as Benelux, Hague, and Libreville.

The fourth list indicates the codes to use to generate the names of certain U.S. Government agencies.

The following countries do not appear in the first two lists of country codes. These countries were previously assigned their own country codes, but they now form parts of other countries.

<u>Country</u>	<u>Now a Part of</u>
British Antarctic Territory	Antarctica
Byelorussian SSR	U.S.S.R.
Dronning Maud Land	Antarctica
New Guinea	Indonesia and Papua New Guinea
Portuguese Timor	Indonesia
Ryuku Islands	Japan
Sikkim	India
Swann Islands	Honduras
Ukranian SSR	U.S.S.R.

Note that Euratom is no longer listed. Also the Code "KN," which was previously assigned to the British West Indies, is now used to designate the islands of St. Christopher-Nevis-Anquilla. The islands of Jamaica, The Bahamas, Barbados, and Trinidad and Tobago, which previously formed a part of the British West Indies, are now independent and are assigned their own individual codes.



An "X" will appear in the third position of all country codes in the data base (i.e., AFX, ALX, DZX, etc.), with the exception of those locations marked with an asterisk on the following pages.

Locations which do not have their own ICIREPAT country codes are assigned the same code as the higher political or geographic entity of which they form a part or to which they belong. Channel Islands, England, Great Britain, Northern Ireland, Scotland, and Wales, for instance, are all divisions of the United Kingdom and are also assigned the GB country codes. To differentiate these locations from the higher entity, the third position has been designated as a numeral (i.e., Channel Islands is GB1; England is GB2; Great Britain is GB3, etc.). By using the GB2 code, for instance, the correct geographic location can be generated for the inventor and/or the assignee.

ICIREPAT COUNTRY CODES  
ALPHABETIZED BY COUNTRY NAME

<u>COUNTRY</u>	<u>CODE*</u>	<u>SPELLING FOR PATENTS</u>
Afghanistan	AF	Afghanistan
Albania	AL	Albania
Algeria	DZ	Algeria
American Samoa	AS	American Samoa
Andorra	AD	Andorra
Angola	AO	Angola
Antarctica	AQ	Antarctica
Antigua	AG	Antigua
Argentina	AR	Argentina
Australia	AU	Australia
Austria	AT	Austria
Bahamas, The (formerly Bahamas)	BS	The Bahamas
Bahrain	BH	Bahrain
Bangladesh	BD	Bangladesh
Barbados	BB	Barbados
Belgium	BE	Belgium
Belize	BZ	Belize
Benin (formerly Dahomey)	BJ	Benin
Bermuda	BM	Bermuda
Bhutan	BT	Bhutan
Bolivia	BO	Bolivia
Botswana	BW	Botswana
Bouvetoya (formerly Bouvet Island)	BV	Bouvetoya
Brazil	BR	Brazil
British Indian Ocean Territory	IO	Br. Indian Ocean Ter.
British Virgin Islands	VG	British Virgin Isl.
Brunei	BN	Brunei
Bulgaria	BG	Bulgaria
Burma	BU	Burma
Burundi	BI	Burundi
Cambodia	KH	Cambodia
Cameroon	CM	Cameroon
Canada	CA	Canada
Canal Zone	PZ	Canal Zone
Canton and Enderbury Islands	CT	Canton/Enderbury Isl.
Cape Verde, Republic of	CV	Rep. of Cape Verde

<u>COUNTRY</u>	<u>CODE</u>	<u>SPELLING FOR PATENTS</u>
Cayman Islands	KY	Cayman Islands
Central African Empire (formerly Central African Republic)	CF	Cent. African Empire
Chad	TD	Chad
*Channel Islands	GB1	Channel Islands
Chile	CL	Chile
China (Taiwan)	TW	Taiwan
China	CN	China
Christmas Island	CX	Christmas Island
Cocos (Keeling) Islands	CC	Cocos (Keeling) Isls.
Colombia	CO	Colombia
Comoros (formerly Comoros Islands)	KM	Comoros
Congo	CG	Congo
Cook Islands	CK	Cook Islands
Costa Rica	CR	Costa Rica
Cuba	CU	Cuba
Cyprus	CY	Cyprus
Czechoslovakia	CS	Czechoslovakia
Denmark	DK	Denmark
Dominica	DM	Dominica
Dominican Republic	DO	Dominican Republic
Ecuador	EC	Ecuador
Egypt	EG	Egypt
El Salvador	SV	El Salvador
*England	GB2	England
Equatorial Guinea	GQ	Equatorial Guinea
Ethiopia	ET	Ethiopia
Faroe Islands (formerly Faeroe Islands)	FO	Faroe Islands
Falkland Islands (Islas Malvinas)	FK	Falkland Islands (I.M.)
Fiji	FJ	Fiji
Finland	FI	Finland
France	FR	France
French Guiana	GF	French Guiana
French Polynesia	PF	French Polynesia

<u>COUNTRY</u>	<u>CODE</u>	<u>SPELLING FOR PATENTS</u>
French Southern and Antarctic Lands	FQ	Fr. So./Antarctic Lands
French Territory of the Afars and Issas	AI	Fr. Terr. Afars/Issas
Gabon	GA	Gabon
Gambia, The (formerly Gambia)	GM	The Gambia
German Democratic Republic	DD	German Democratic Rep.
*Germany, before 1945	DEL	Fed. Rep. of Germany
Germany, Federal Republic of	DE	Fed. Rep. of Germany
Ghana	GH	Ghana
Gibraltar	GI	Gibraltar
Gilbert Islands (formerly Gilbert and Ellice Islands)	GE	Gilbert Islands
*Great Britain	GB3	Great Britain
Greece	GR	Greece
Greenland	GL	Greenland
Grenada	GD	Grenada
Guadeloupe	GP	Guadeloupe
Guam	GU	Guam
Guatemala	GT	Guatemala
Guinea	GN	Guinea
Guinea-Bissau	GW	Guinea-Bissau
Guyana	GY	Guyana
Haiti	HT	Haiti
Heard Island and McDonald Islands	HM	Heard/McDonald Isls.
Honduras	HN	Honduras
Hong Kong	HK	Hong Kong
Hungary	HU	Hungary
Iceland	IS	Iceland
India	IN	India
Indonesia	ID	Indonesia
Iran	IR	Iran
Iraq	IQ	Iraq
Iraq-Saudi Arabia Neutral Zone	NT	Iraq-Saudi Arabia NZ
Ireland	IE	Ireland
*Isle of Man	GB4	Isle of Man
Israel	IL	Israel

COUNTRY

Italy  
Ivory Coast  
Jamaica  
Japan  
Johnston Atoll  
Jordan  
Kenya  
Korea, Democratic Peoples Republic  
of  
Korea, Republic of  
Kuwait  
Laos  
Lebanon  
Lesotho  
Liberia  
Libya  
Liechtenstein  
Luxembourg  
Macao  
Madagascar (formerly Malagasy  
Republic)  
Malawi  
Malaysia  
Maldives  
Mali  
Malta  
Martinique  
Mauritania  
Mauritius  
Mexico  
Midway Islands  
Monaco  
Mongolia  
Montserrat  
Morocco  
Mozambique  
\*Muscat  
Namibia (formerly South-West Africa)

CODE

IT  
CI  
JM  
JP  
JT  
JO  
KE  
KP  
  
KR  
KW  
LA  
LB  
LS  
LR  
LY  
LI  
LU  
MO  
MG  
  
MW  
MY  
MV  
ML  
MT  
MQ  
MR  
MU  
MX  
MI  
MC  
MN  
MS  
MA  
MZ  
OMI  
NA

SPELLING FOR PATENTS

Italy  
Ivory Coast  
Jamaica  
Japan  
Johnston Atoll  
Jordan  
Kenya  
D.P.R. of Korea  
  
Rep. of Korea  
Kuwait  
Laos  
Lebanon  
Lesotho  
Liberia  
Libya  
Liechtenstein  
Luxembourg  
Macao  
Madagascar  
  
Malawi  
Malaysia  
Maldives  
Mali  
Malta  
Martinique  
Mauritania  
Mauritius  
Mexico  
Midway Islands  
Monaco  
Mongolia  
Montserrat  
Morocco  
Mozambique  
Muscat  
Namibia

COUNTRY

Nauru  
Navassa Island  
Nepal  
Netherlands  
Netherlands Antilles  
New Caledonia  
New Hebrides  
New Zealand  
Nicaragua  
Niger  
Nigeria  
Niue  
Norfolk Island  
\*Northern Ireland  
Norway  
Oman  
Pakistan  
Panama  
Papua New Guinea  
Paracel Islands  
Paraguay  
Peru  
Philippines  
Pitcairn (formerly Pitcairn Island)  
Poland  
Portugal  
Puerto Rico  
Qatar  
Reunion  
Romania  
Rwanda  
St. Christopher-Nevis-Anguilla  
St. Helena  
St. Lucia  
St. Pierre and Miquelon  
St. Vincent  
San Marino  
Sao Tome and Principe

CODE

NR  
NV  
NP  
NL  
AN  
NC  
NH  
NZ  
NI  
NE  
NG  
NU  
NF  
GB5  
NO  
OM  
PK  
PA  
PG  
PI  
PY  
PE  
PH  
PN  
PL  
PT  
PR  
QA  
RE  
RO  
RW  
KN  
SH  
LC  
PM  
VC  
SM  
ST

SPELLING FOR PATENTS

Nauru  
Navassa Island  
Nepal  
Netherlands  
Netherlands Antilles  
New Caledonia  
New Hebrides  
New Zealand  
Nicaragua  
Niger  
Nigeria  
Niue  
Norfolk Island  
Northern Ireland  
Norway  
Oman  
Pakistan  
Panama  
Papua New Guinea  
Paracel Islands  
Paraguay  
Peru  
Philippines  
Pitcairn  
Poland  
Portugal  
Puerto Rico  
Qatar  
Reunion  
Romania  
Rwanda  
St. Chris.-Nevis-Ang.  
St. Helena  
St. Lucia  
St. Pierre/Miquelon  
St. Vincent  
San Marino  
Sao Tome/Principe

<u>COUNTRY</u>	<u>CODE</u>	<u>SPELLING FOR PATENTS</u>
Saudi Arabia	SA	Saudi Arabia
*Scotland	GB6	Scotland
Senegal	SN	Senegal
Seychelles	SC	Seychelles
Sierra Leone	SL	Sierra Leone
Singapore	SG	Singapore
Solomon Islands	SB	Solomon Islands
Somalia	SO	Somalia
South Africa	ZA	South Africa
Southern Rhodesia	RH	Southern Rhodesia
Spain	ES	Spain
Spratly Islands	SI	Spratly Islands
Sri Lanka	LK	Sri Lanka
Sudan	SD	Sudan
Surinam	SR	Surinam
Svalbard and Jan Mayen	SJ	Svalbard and Jan Mayen
Swaziland	SZ	Swaziland
Sweden	SE	Sweden
Switzerland	CH	Switzerland
Syria	SY	Syria
Tanzania, United Republic of	TZ	United Rep. of Tanzania
Thailand	TH	Thailand
*Tibet	CN1	Tibet
Togo	TG	Togo
Tokelau Islands	TK	Tokelau Islands
Tonga	TO	Tonga
Trinidad and Tobago	TT	Trinidad and Tobago
Trust Territory of the Pacific Islands (includes Caroline, Mariana, and Marshall Island groups)	PC	Trust Ter. Pacific Isl.
Tunisia	TN	Tunisia
Turkey	TR	Turkey
Turks and Caicos Islands	TC	Turks and Caicos Isls.
Tuvalu (formerly Gilbert and Ellice Islands)	TV	Tuvalu
Uganda	UG	Uganda

COUNTRYCODESPELLING FOR PATENTS

Union of Soviet Socialist Republics	SU	U.S.S.R.
United Arab Emirates	AE	United Arab Emirates
United Kingdom	GB	United Kingdom
United States	US	United States
United States Miscellaneous	PU	U.S. Misc. Pac. Isls.
Pacific Islands (includes		
Kingman Reef, Howland, Baker and		
Jarvis Islands, and Palmyra Atoll)		
Upper Volta	HV	Upper Volta
Uruguay	UY	Uruguay
Vatican City	VA	Vatican City
Venezuela	VE	Venezuela
Vietnam (formerly Democratic	VN	Vietnam
Republic of Vietnam and		
Republic of South Vietnam)		
Virgin Islands of the U.S.	VI	Virgin Isls. of U.S.
Wake Island	WK	Wake Island
*Wales	GB7	Wales
Wallis and Futuna	WF	Wallis and Futuna
Western Sahara (formerly Spanish	EH	Western Sahara
Sahara)		
Western Samoa	WS	Western Samoa
Yemen (Aden)	YD	Yemen (Aden)
Yemen (Sana)	YE	Yemen (Sana)
Yugoslavia	YU	Yugoslavia
Zaire	ZR	Zaire
Zambia (formerly Northern Rhodesia)	ZM	Zambia



COUNTRY NAMES  
ALPHABETIZED BY COUNTRY CODES

<u>CODE</u>	<u>COUNTRY</u>
AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua
*AI	French Territory of the Afars and Issas
*AL	Albania
AN	Netherlands Antilles
AO	Angola
*AQ	Antarctica
AR	Argentina
AS	American Samoa
*AT	Austria
AU	Australia
*BB	Barbados
*BD	Bangladesh
BE	Belgium
BG	Bulgaria
*BH	Bahrain
BI	Burundi
*BJ	Benin
BM	Bermuda
BN	Brunei
BO	Bolivia
BR	Brazil
BS	The Bahamas
*BT	Bhutan
BU	Burma
*BV	Bouvetoya
*BW	Botswana
BZ	Belize
CA	Canada
*CC	Cocos (Keeling) Islands
*CF	Central African Empire
*CG	Congo
CH	Switzerland
CI	Ivory Coast
*CK	Cook Islands
*CL	Chile
*CM	Cameroon

\*These countries were assigned new or revised ICIREPAT  
Country Codes, effective January 1, 1978.

<u>CODE</u>	<u>COUNTRY</u>
*CN	China
*CN1	Tibet
CO	Colombia
CR	Costa Rica
CS	Czechoslovakia
*CT	Canton and Enderbury Islands
CU	Cuba
CV	Republic of Cape Verde
*CX	Christmas Island
CY	Cyprus
*DD	German Democratic Republic
*DE	Federal Republic of Germany
*DE1	Germany, before 1945
DK	Denmark
*DM	Dominica
*DO	Dominican Republic
*DZ	Algeria
EC	Ecuador
*EG	Egypt
*EH	Western Sahara
ES	Spain
*ET	Ethiopia
*FI	Finland
FJ	Fiji
*FK	Falkland Islands (Islas Malvinas)
*FO	Faroe Islands
*PQ	French Southern and Antarctic Lands
FR	France
GA	Gabon
GB	United Kingdom
*GB1	Channel Islands
*GB2	England
*GB3	Great Britain
*GB4	Isle of Man
*GB5	Northern Ireland
*GB6	Scotland
*GB7	Wales
GD	Grenada
*GE	Gilbert Islands
*GF	French Guiana
GH	Ghana
*GI	Gibraltar
*GL	Greenland
*GM	The Gambia
*GN	Guinea
*GP	Guadeloupe
GQ	Equatorial Guinea
GR	Greece

<u>CODE</u>	<u>COUNTRY</u>
*GT	Guatemala
*GU	Guam
GW	Guinea-Bissau
GY	Guyana
HK	Hong Kong
*HM	Heard Island and McDonald Islands
*HN	Honduras
*HT	Haiti
HU	Hungary
*HV	Upper Volta
ID	Indonesia
*IE	Ireland
IL	Israel
IN	India
*IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
*JP	Japan
*JT	Johnston Atoll
KE	Kenya
*KH	Cambodia
KM	Comoros
KN	St. Christopher-Nevis-Anquilla
*KP	Democratic Peoples Republic of Korea
*KR	Republic of Korea
*KW	Kuwait
*KY	Cayman Islands
LA	Laos
LB	Lebanon
*LC	St. Lucia
*LI	Liechtenstein
*LK	Sri Lanka
LR	Liberia
LS	Lesotho
LU	Luxembourg
LY	Libya
MA	Morocco
MC	Monaco
*MG	Madagascar

<u>CODE</u>	<u>COUNTRY</u>
*MI	Midway Islands
*ML	Mali
*MN	Mongolia
*MO	Macao
*MQ	Martinique
*MR	Mauritania
*MS	Montserrat
*MT	Malta
*MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia
*NE	Niger
*NF	Norfolk Island
*NG	Nigeria
*NH	New Hebrides
*NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
*NT	Iraq-Saudi Arabia Neutral Zone
*NU	Niue
*NV	Navassa Island
NZ	New Zealand
*OM	Oman
*OM1	Muscat
*PA	Panama
PC	Trust Territory of the Pacific Islands
PE	Peru
*PF	French Polynesia
*PG	Papua New Guinea
PH	Philippines
*PI	Paracel Islands
PK	Pakistan
*PL	Poland
*PM	St. Pierre and Miquelon
*PN	Pitcairn
PR	Puerto Rico
PT	Portugal
*PU	United States Miscellaneous Pacific Islands
*PY	Paraguay
PZ	Canal Zone

<u>CODE</u>	<u>COUNTRY</u>
QA	Qatar
*RE	Reunion
RH	Southern Rhodesia
*RO	Romania
RW	Rwanda
SA	Saudi Arabia
*SB	Solomon Islands
SC	Seychelles
SD	Sudan
*SE	Sweden
SG	Singapore
*SH	St. Helena
*SI	Spratly Islands
*SJ	Svalbard and Jan Mayen
*SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Surinam
ST	Sao Tome and Principe
SU	Union of Soviet Socialist Republics
*SV	El Salvador
*SY	Syria
SZ	Swaziland
*TC	Turks and Caicos Islands
*TD	Chad
*TG	Togo
TH	Thailand
*TK	Tokolau Islands
TN	Tunisia
*TO	Tonga
TR	Turkey
*TT	Trinidad and Tobago
*TV	Tuvalu
*TW	China (Taiwan)
*TZ	United Republic of Tanzania
UG	Uganda
US	United States
UY	Uruguay
*VA	Vatican City
*VC	St. Vincent
VE	Venezuela
*VG	British Virgin Islands
VI	Virgin Islands of the U.S.
*VN	Vietnam

<u>CODE</u>	<u>COUNTRY</u>
*WF	Wallis and Futuna
*WK	Wake Island
WS	Western Samoa
*YD	Yemen (Aden)
YE	Yemen (Sana)
YU	Yugoslavia
ZA	South Africa
*ZM	Zambia
*ZR	Zaire

### CODING FOR U.S. AGENCIES

The following U.S. Government agencies will be coded in the data base as shown:

<u>Agency</u>	<u>Code</u>
U.S. Air Force	USF
U.S. Army	USA
U.S. Navy	USN
NASA	USS
ERDA	USE

COUNTRY CODES FOR INTERNATIONAL ORGANIZATIONS  
IN THE FIELD OF INDUSTRIAL PROPERTY

World Intellectual Property Organization (WIPO). . . . . WO\*  
European Patent Organization (EPO) . . . . . EP\*  
International Patent Institute (IIB) . . . . . IB\*  
African Intellectual Property Organization (OAPI). . . . . OA

COUNTRY CODES FOR INTERNATIONAL AGREEMENTS

The following Country Codes have been assigned to international agreements (or treaties) entered into by various Convention countries:

Benelux Designs Convention (printed on the patent front page as "Benelux") . . . . . XB

Hague Agreement Concerning the International Deposit of Industrial Designs (printed on the patent front page as "Hague") . . . . . XH

Libreville Agreement (printed on the patent front page as "Libreville"). This Country Code is the same as African Intellectual Property Organization, above. . . . . OA

\*As of January 24, 1978, the Patent Cooperation Treaty (PCT) went into effect. Applications filed under that treaty are designated as World Intellectual Property Organization (WIPO) applications, and are coded "WO". Applications filed with the European Patent Organization (EPO), a separate administrative and technical organization involving nine countries, became effective January 1, 1978, and are coded "EP". The International Patent Institute (IIB), which is a searching authority for the EPO, also became effective January 1, 1978. (There is only a remote possibility, however, that an application will ever be filed with the IIB.)



## Appendix A - Definition of Paragraph ID Codes

The following information defines the types of paragraph ID Codes that may appear in data records containing text. The definition identifies the appearance of the printed document.

<u>ID Code</u> <u>(positions 1-4)</u> <u>of data records)</u>	<u>Definition</u>
PAR	This ID Code begins a new paragraph with an indented first line and all subsequent lines justified to the left margin.
PAC	This ID Code begins data that is centered and is generally used in text headings or titles.
PAL	This ID Code begins a new paragraph with all lines justified to the left margin.
PA0	This ID Code begins a new paragraph with the first line left justified and all subsequent lines indented 1 space.
PA1	This ID Code begins a new paragraph with the first line indented 1 space and all subsequent lines indented 2 spaces.
PA2	This ID Code begins a new paragraph with the first line indented 2 spaces and all subsequent lines indented 3 spaces.
PA3	This ID Code begins a new paragraph with the first line indented 3 spaces and all subsequent lines indented 4 spaces.
PA4	This ID Code begins a new paragraph with the first line indented 4 spaces and all subsequent lines indented 5 spaces.
PA5	This ID Code begins a new paragraph with the first line indented 5 spaces and all subsequent lines indented 6 spaces.
FNT <sup>1</sup>	This ID Code begins a footnote with all lines justified to the left margin.

<sup>1</sup>A footnote in a table will be considered a part of the table (ID Code - TBL or TBL3) and will not have a FNT ID Code.

Appendix A - Definition of Paragraph ID Codes (continued)

ID Code  
(positions 1-4)  
of data records)

Definition

TBL

This ID Code identifies the beginning of a table. All data appears within appropriate columns. A hex "0D" character will be present in position 80 of each table record.

TBL3

This ID Code identifies the beginning of a three-column table. A three-column table is a table that is rotated on its side (landscape) in a printed patent document. All rules in Appendix B - The appearance of Text, 1. Data Records will apply to TBL3 tables. Due to the size of a TBL3 table, data does not appear within columns.

EQU

This ID Code identifies the beginning of an in-line equation. An in-line equation is one that can appear on a data line(s) and does not have characters or symbols that are drawn above or below a line.

## Appendix B - The Appearance of Text

### 1. Data Records

All text data will be placed in fixed length records formatted as follows:

Positions 1-4	ID Code - (position 4 of the ID Code for data fields will contain a space)
Position 5	Will contain a space in all records
Positions 6-80	Text Data

The ID Code (Positions 1-4) will identify the type of text. Example: TTL for Title of Invention, PAR begins a new paragraph. All possible ID Codes are defined throughout this technical reference.

The text data will appear in positions 6-80 of each record. If a series of text data requires more than one record (75 characters) continuation record(s) will be used. The ID Code (Positions 1-4) of continuation records will contain spaces.

Words in text data will not be hyphenated between records. If a word cannot be completed in one record the entire word will be placed in a continuation record.

The exception to hyphenations appearing in text data is when a hyphenation appeared in the printed patent document.

Trailing spaces in text data records will be ignored, leading spaces are significant and will be retained. Therefore, position 6 of continuation record will contain a space.<sup>1</sup>

Examples of the appearance of text data records are in Appendix D - Patent Documents as they appear in machine-readable form on the Patent Full-Text/APS File.

### 2. Table Data Records<sup>2</sup>

All table text data will be placed in fixed length records formatted as follows:

Positions 1-4	ID Code
Position 5	Will contain a space in all records
Positions 6-79	Will contain table text data.
Position 80	Will contain a Hex "0D" in each table data record.

<sup>1</sup>This applies to all continuation records, bibliographic data and text data. This does not apply to table text data records.

<sup>2</sup>Applies to TBL tables only. TBL3 tables follow rules as defined in 1. Data Records.

## Appendix B - The Appearance of Text (continued)

The ID Code (positions 1-4) will contain "TBL " in the first record. This field will contain spaces in all subsequent records of the table.

The table text data will appear in appropriate columns (positions 6-79) of each record.

Columns will be separated by a minimum of 1 space. Therefore, if data from a column runs into another column, the data from the second or subsequent columns will appear in the appropriate column on the next record (line).

Words in table text data will not be hyphenated between records. If a word cannot be completed in one record (line), the entire word will be placed in the appropriate column on the next record (line).

The exception to hyphenations appearing in tables is when a hyphenation appeared in the printed patent document.

### 3. Special Characters

Patent documents contain information that, in some cases, do not have a binary representation or for photocomposition purpose must be handled with special consideration. This information appears on the patent full-text/APS file using special characters. Reference Appendix C - Special Characters.

Examples of the appearance of special characters can be found throughout the patents documents in Appendix D.

### 4. Chemical Structures, Tables and Equations

The location of images (chemical structures, tables and equations) residing in patent documents will be identified by a Call-Out Identifier:

<u>Image Type</u>	<u>Call-Out Identifier</u>
Chemical Structure	##STR <sub>n</sub> ##
Table <sup>1</sup>	##TBL <sub>n</sub> ##
Equation <sup>2</sup>	##EQU <sub>n</sub> ##
Vertical Spacing <sup>3</sup>	##SPC <sub>n</sub> ##

<sup>1</sup>A table call-out will only appear when table data is not present, or the complexity of the table is such that it is not feasible to make it machine-readable.

<sup>2</sup>An equation call-out will be present when the equation contains symbols that are drawn above or below a line.

<sup>3</sup>A vertical spacing call-out will be present to identify where hand inserted material would appear.

## Appendix B - The Appearance of Text (continued)

NOTE:  $n$  in the Call-Out Identifier is a number to identify the image. Each image will be numbered sequentially from the beginning of the document. The first chemical structure would be ##STR1##, the second ##STR2##, etc. Each Image Type within a patent would be numbered beginning with 1.



## Appendix C - Special Characters

The following identifies special characters. Column 1 shows the appearance of special characters currently used for photocomposition. Column 2 shows the appearance of special characters on the patent full-text/APS file. A space in column 2 would appear on the file. Missing numbers in column 1 means the number is not used.

<u>Column 1</u>	<u>Column 2</u>	<u>Hex</u>	<u>Description</u>
+1	'	79	Single open quote
+2	'	79	Single close quote
+3	'	7D	Apostrophe
+4	.varies.		Varies as
+5	.ident.		Identical
+6	.notident.		Not identical
+7	.differential.		Differential
+8	[	4A	Open bracket
+9	]	5A	Close bracket
+10			Em space
+11			En space
+12			Thin space
+13	--	6060	Em dash
+14	-	60	En dash
+15	.		En leader
+16	.noteq.		Not equal symbol
+17	.intg.		Integral symbol
+18	.about.		Difference symbol
+19	.multidot.		Multiplication dot
+20	.degree.		degree symbol
+21	<		Less than symbol
+22	>		Greater than symbol
+23	.ltoreq.		Less than or equal to symbol
+24	.gtoreq.		Greater than or equal to symbol
+25	.congruent.		Congruent symbol
+26	.apprxeq.		Approx. equal symbol
+27	.cent.		Cent sign
+28	.infin.		Infinity symbol
+29	.sqroot.		Square root symbol
+30	+		Plus sign
+31	-		Minus sign
+32	=		Equal sign
+33	.times.		Multiplication sign
+34	.div.		Division sign
+35	.+-.		Plus or minus sign
+36	.-+.		Minus or plus sign
+37	"		Double open quote
+38	"		Double close quote
+39	.revreaction.		Reversible reaction symbol
+40	'	7D	Prime symbol
+41	"	7F	Double prime symbol
+42	.increment.		Increment symbol
+43	.fwdarw.		Forward arrow (right)
+44	.thrfore.		Therefore symbol
+45	.because.		Because symbol

+46	.music-sharp.		Music sharp symbol
+47	.music-flat.		Music flat symbol
+48	?		Question mark
+49	!	4F	Exclamation point
+50	.dbd.		Double bond symbol
+51	.vertline.		Vertical line symbol
+52	.uparw.		Up arrow
+53	.hoarfrost.		Hoarfrost symbol
+54	.cuberoot.		Cube root symbol
+55	{	C0	Open brace
+56	}	D0	Close brace
+57	.tbd.		Triple bond symbol
+58	.quadrature.		Quadrature symbol
+59	.gradient.		Gradient symbol
+60	.alpha.		Greek alpha symbol
+61	.sym.		Postive earth symbol (symmetry)
+62	.beta.		Greek beta symbol
+63	.crclbar.		Negative earth sym.(circle bar)
+64	.GAMMA.		Greek GAMMA symbol (upper case)
+65	.gamma.		Greek gamma symbol (lower case)
+66	.DELTA.		Greek DELTA symbol (upper case)
+67	.delta.		Greek delta symbol (lower case)
+68	.epsilon.		Greek epsilon sym. (lower case)
+69	.EPSILON.		Greek EPSILON sym. (upper case)
+70	.zeta.		Greek zeta symbol (lower case)
+71	.function.		Function symbol
+72	.eta.		Greek eta symbol
+73	.THETA.		Greek THETA symbol (upper case)
+74	.theta.		Greek theta symbol (lower case)
+75	.dwnarw.		Down arrow
+76	.lota.		Greek lota symbol
+77	.rarw.		reverse arrow - left
+78	.kappa.		Greek kappa symbol (lower case)
+79	.LAMBDA.		Greek LAMBDA symbol (upper case)
+80	.lambda.		Greek lambda symbol (lower case)
+81	.parallel.		Parallel symbol
+82	.mu.		Greek mu symbol
+83	.sup..parallel.		Superscripted parallel symbol
+84	.nu.		Greek nu symbol
+85	.XI.		Greek XI symbol (upper case)
+86	.xi.		Greek xi symbol (lower case)
+87	.sub..parallel.		Subscripted parallel symbol
+88	.omicron.		Greek omicron symbol
+89	.sub'.fwdarw.		Superscripted forward arrow
+90	.pi.		Greek pi symbol (lower case)
+91	.sub..fwdarw.		subscripted forward arrow
+92	.rho.		Greek rho symbol
+93	.SIGMA.		Greek SIGMA symbol (upper case)
+94	.sigma.		Greek sigma symbol (lower case)
+95	.sup..rarw.		Superscripted reverse arrow
+96	.tau.		Greek tau symbol
+97	.UPSILON.		Greek UPSILON symbol (upper case)
+98	.upsilon.		Greek upsilon symbol (lower case)
+99	.sub..rarw.		Subscripted reverse arrow
+100	.phi.		Greek phi symbol (lower case)



+101	.PHI.	Greek PHI symbol (upper case)
+102	.chi.	Greek chi symbol
+104	.psi.	Greek psi symbol (lower case)
+105	.PSI.	Greek PSI symbol (upper case)
+106	.OMEGA.	Greek OMEGA symbol (upper case)
+107	.omega.	Greek omega symbol (lower case)
+108	.cndot.	Solid dot - center
+109	.andgate.	And gate symbol
+110	.angle.	Angle symbol
+111	.sup.[	NOTE: Column 1 numbers 111 thru 184 represent special characters as previous defined but appearing either sub- scripted or superscripted.
+112	.sup.]	
+113	.sub.[	
+114	.sub.]	
+115	.sup.+	
+116	.sup.-	
+117	.sub.+	
+118	.sub.-	
+119	.sup.+-	
+120	.sup.-+	
+121	.sub.+-	
+122	.sub.-+	
+123	.sup.*	
+124	.sub.*	
+125	.sup.=	
+126	.sub.=	
+127	.sup.-	Per mill symbol (salinity)
+128	.sub.-	
+129	.permill.	
+130	.sup.1/8	
+131	.sub.1/8	
+132	.sup.3/8	
+133	.sub.3/8	
+134	.sup.5/8	
+135	.sub.5/8	
+136	.sup.7/8	
+137	.sub.7/8	
+138	.sup.1/3	
+139	.sub.1/3	
+140	.sup.2/3	
+141	.sub.2/3	
+142	.sup.1/4	
+143	.sub.1/4	
+144	.sup.1/2	Superscripted less than or equal Subscripted less than or equal
+145	.sub.1/2	
+146	.sup.3/4	
+147	.sub.3/4	
+148	.sup..lmtoreq.	
+149	.sub..lmtoreq.	
+150	1/8	
+151	.sup..gtoreq.	
+152	1/8	
+153	.sub..gtoreq.	
+154	3/8	
+155	.lmtorsim.	Superscripted greater to or equal Subscripted greater to or equal
+156	3/8	

less than or approx. equal to

+157	.gtorsim.	greater than or approx. equal to
+158	5/8	
+159	.sup..lmtorsim.	
+160	5/8	
+161	.sup..gtorsim.	
+162	7/8	
+163	.sub..lmtorsim.	
+164	7/8	
+165	.sub..gtorsim.	
+166	1/3	
+167	.perspectiveto.	Perspective to symbol
+168	1/3	
+170	2/3	
+171	.[.	Open bold bracket (reissue)
+172	2/3	
+173	.].	Close bold bracket (reissue)
+174	1/4	
+176	1/4	
+178	1/2	
+180	1/2	
+182	3/4	
+183	3/4	
+184	3/4	
+185	.quadbond.	Quadbond symbol
+186	.sup..crclbar	Superscripted neg. earth symbol
+187	.sub..crclbar.	Subscripted negative earth symbol
+188	.sup..sym.	Superscripted pos. earth symbol
+189	.sub..sym.	Subscripted position earth symbol
+190	#	Number sign
+191	.notlessthan.	not less than symbol
+192	.notgreaterthan.	not greater than symbol
+193	.music-natural.	Music natural sign
+194	.apprch.	Approaches symbol
+195	.perp.	Perpendicular symbol
+196	.fourthroot.	Fourth root symbol
+198	.TM.	Trademark symbol
+199	.SM.	Service mark symbol
+200	.RTM.	Registered trademark symbol
+201	.COPYRG.	Copyright symbol
+202	.sup.'.	Superscripted apostrophe
+203	.sub.'.	Subscripted apostrophe
+204	.sup.."	Superscripted double prime
+205	.sub.."	Subscripted double prime
+206	.sup.'.	Superscripted prime
+207	.sub.'.	Subscripted prime
+208	.sup..degree.	Superscripted degree symbol
+209	.sub..degree.	Subscripted degree symbol
+210	.sup.-	Superscripted en dash
+211	.sup.--	Superscripted em dash
+212	.sub.-	Subscripted en dash
+213	.sub.--	Subscripted em dash
+214	.sup..div.	Superscripted division sign
+215	.sub..div.	Subscripted division sign
+216	.sup..infin.	Superscripted infinity symbol
+217	.sub..infin.	Subscripted infinity symbol

+218	.sup.'	Superscripted single open quote
+219	.sup.'	Superscripted single close quote
+220	.sup..dblquote.	Superscripted double open quote
+221	.sup..dblquote.	Superscripted double close quote
+222	.sub.'	Subscripted open single quote
+223	.sub.'	Subscripted close single quote
+224	.sub.dblquote.	Subscripted double open quote
+225	.sub.dblquote.	Subscripted double close quote
+226	.sup.l	Superscripted script l
+227	.sub.l	Subscripted script l

+228	.sub.#
+229	.sup.#
+230	.sub.<
+231	.sup.<
+232	.sub.>
+233	.sup.>
+234	.sub..vertline.
+235	.sup..vertline.
+236	.sup..not <.
+237	.sub..not <.
+238	.sup..not >.
+239	.sub..not >.
+240	.sup..noteq.
+241	.sub..noteq.
+242	.sup.
+243	.sub.
+244	.sup.
+245	.sub.
+246	.sup..sqrt.
+247	.sub..sqrt.
+248	.sup..cuberoot.
+249	.sub..cuberoot.
+250	.sup..function.
+251	.sub..function.
+252	.sup..4th root.
+253	.sub..4th root.

NOTE: Column 1 numbers 228 thru 253 represent special characters as previous defined but appearing either subscripted or superscripted.

+261	A
+262	B
+263	C
+264	D
+265	E
+266	F
+267	G
+268	H
+269	I
+270	J
+271	K
+272	L
+273	M
+274	N
+275	O
+276	P
+277	Q
+278	R
+279	S

NOTE: Column 1 numbers 261 thru 286 represent the alphabet in "small caps". They will appear on APS as normal caps

+280	T
+281	U
+282	V
+283	W
+284	X
+285	Y
+286	Z
+290	.sbsb.0
+291	.sbsb.1
+292	.sbsb.2
+293	.sbsb.3
+294	.sbsb.4
+295	.sbsb.5
+296	.sbsb.6
+297	.sbsb.7
+298	.sbsb.8
+299	.sbsb.9
+300	.sup..alpha.
+301	.sub..alpha.
+302	.sup..omega.
+303	.sub..omega.
+304	.sup..theta.
+305	.sub..theta.
+306	.sup..lambda.
+307	.sub..lambda.
+308	.sup..eta.
+309	.sub..eta.
+310	.sup..mu.
+311	.sub..mu.
+312	.sup..delta.
+313	.sub..delta.
+314	.sup..pi.
+315	.sub..pi.
+316	.sup..gamma.
+317	.sub..gamma.
+318	.sup..SIGMA.
+319	.sub..SIGMA.
+320	.sup..epsilon.
+321	.sub..epsilon.
+322	.sup..phi.
+323	.sub..phi.
+324	.sup..sigma.
+325	.sub..sigma.
+326	.sup..nu.
+327	.sub..nu.
+328	.sup..tau.
+329	.sub..tau.
+330	.sup..beta.
+331	.sub..beta.
+332	.sup..upsilon.
+333	.sub..upsilon.
+334	.sup..psi.
+335	.sub..psi.
+336	.sup..rho.
+337	.sub..rho.

NOTE: Column 1 numbers 290 thru 299 represent numeric values 1 - 9 as being a subscript of a subscript.

NOTE: Column 1 numbers 300 thru 337 represent special characters as previous defined but appearing either subscripted or superscripted.

+338 .sbsb.a  
 +339 .sbsb.b  
 +340 .sbsb.c  
 +341 .sbsb.d  
 +342 .sbsb.e  
 +343 .sbsb.f  
 +344 .sbsb.g  
 +345 .sbsb.h  
 +346 .sbsb.i  
 +347 .sbsb.j  
 +348 .sbsb.k  
 +349 .sbsb.l  
 +350 .sbsb.m  
 +351 .sbsb.n  
 +352 .sbsb.o  
 +353 .sbsb.p  
 +354 .sbsb.q  
 +355 .sbsb.r  
 +356 .sbsb.s  
 +357 .sbsb.t  
 +358 .sbsb.u  
 +359 .sbsb.v  
 +360 .sbsb.w  
 +361 .sbsb.x  
 +362 .sbsb.y  
 +363 .sbsb.z  
 +364 .sbsp.a  
 +365 .sbsp.b  
 +366 .sbsp.c  
 +367 .sbsp.d  
 +368 .sbsp.e  
 +369 .sbsp.f  
 +370 .sbsp.g  
 +371 .sbsp.h  
 +372 .sbsp.i  
 +373 .sbsp.j  
 +374 .sbsp.k  
 +375 .sbsp.l  
 +376 .sbsp.m  
 +377 .sbsp.n  
 +378 .sbsp.o  
 +379 .sbsp.p  
 +380 .sbsp.q  
 +381 .sbsp.r  
 +382 .sbsp.s  
 +383 .sbsp.t  
 +384 .sbsp.u  
 +385 .sbsp.v  
 +386 .sbsp.w  
 +387 .sbsp.x  
 +388 .sbsp.y  
 +389 .sbsp.z  
 +390 .spsp.0  
 +391 .spsp.1  
 +392 .spsp.2  
 +393 .spsp.3

NOTE: Column 1 numbers 338 thru 363 represent lower case letters that appear as a subscript of a subscript.

NOTE: Column 1 numbers 364 thru 389 represent lower case letters that appear as a subscript to a superscript.

NOTE: Column 1 numbers 390 thru 399 represent numeric values 1 - 9 as being a superscript of a superscript.

+394 .spsp.4  
 +395 .spsp.5  
 +396 .spsp.6  
 +397 .spsp.7  
 +398 .spsp.8  
 +399 .spsp.9  
 +400 .sbsp.0  
 +401 .sbsp.1  
 +402 .sbsp.2  
 +403 .sbsp.3  
 +404 .sbsp.4  
 +405 .sbsp.5  
 +406 .sbsp.6  
 +407 .sbsp.7  
 +408 .sbsp.8  
 +409 .sbsp.9  
 +410 .spsb.0  
 +411 .spsb.1  
 +412 .spsb.2  
 +413 .spsb.3  
 +414 .spsb.4  
 +415 .spsb.5  
 +416 .spsb.6  
 +417 .spsb.7  
 +418 .spsb.8  
 +419 .spsb.9  
 +438 .spsp.a  
 +439 .spsp.b  
 +440 .spsp.c  
 +441 .spsp.d  
 +442 .spsp.e  
 +443 .spsp.f  
 +444 .spsp.g  
 +445 .spsp.h  
 +446 .spsp.i  
 +447 .spsp.j  
 +448 .spsp.k  
 +449 .spsp.l  
 +450 .spsp.m  
 +451 .spsp.n  
 +452 .spsp.o  
 +453 .spsp.p  
 +454 .spsp.q  
 +455 .spsp.r  
 +456 .spsp.s  
 +457 .spsp.t  
 +458 .spsp.u  
 +459 .spsp.v  
 +460 .spsp.w  
 +461 .spsp.x  
 +462 .spsp.y  
 +463 .spsp.z  
 +464 .spsb.a  
 +465 .spsb.b  
 +466 .spsb.c

NOTE: Column 1 numbers 400 thru 409 represent numeric values 1 - 9 as being a subscript of a superscript.

NOTE: Column 1 numbers 410 thru 419 represent numeric values 1 - 9 as being a superscript of a subscript.

NOTE: Column 1 numbers 438 thru 463 represent lower case letters that appear as superscript of a superscript

NOTE: Column 1 numbers 464 thru 489 represent lower case letters that appear as superscript of a subscript.

+467	.spsb.d	
+468	.spsb.e	
+469	.spsb.f	
+470	.spsb.g	
+471	.spsb.h	
+472	.spsb.i	
+473	.spsb.j	
+474	.spsb.k	
+475	.spsb.l	
+476	.spsb.m	
+477	.spsb.n	
+478	.spsb.o	
+479	.spsb.p	
+480	.spsb.q	
+481	.spsb.r	
+482	.spsb.s	
+483	.spsb.t	
+484	.spsb.u	
+485	.spsb.v	
+486	.spsb.w	
+487	.spsb.x	
+488	.spsb.y	
+489	.spsb.z	
+500	.cndot.	Center Dot (Solid Dot)
+501	.circle.	Large Circle
+502	.circleincircle.	Circle in a large circle
+503	.lhalfcircle.	Left-half circle
+504	.rhalfcircle.	Right-half circle
+505	.dottedcircle.	Dotted circle
+506	.THorizBrace.	Top horizontal brace
+507	.BHorizBrace.	Bottom horizontal brace
+508	.dotlhalfcircle	Dotted left-half circle
+509	.dotrhalfcircle	Dotted right-half circle
+510	.dotthalfcircle.	Dotted top-half circle
+511	.dotbhalfcircle.	Dotted bottom-half circle
+512	.solthalfcircle.	Solid top-half circle
+513	.solbhalfcircle.	Solid bottom-half circle
+515	.male.	Male symbol
+516	.female.	Female symbol
+517	.sctn.	Section symbol
+518	.0.	Slashed zero (light print)
+519	.0.	Slashed zero (bold print)
+520	.orgate.	or gate symbol
+521	.ANG.	Angstrom (upper case)
+522	.ang.	Angstrom (lower case)
+601	.smallcircle	Small circle
+701	.largecircle.	Large circle

The following special characters precede data on the patent full-text/APS file:

<u>Column 2</u>	<u>Description</u>
.sub.	- Subscript -
.sup.	- Superscript -
.sbsb.	- Subscript of a Subscript -
.spsp.	- superscript of a superscript-
.sbsp.	- subscript of a superscript-
.spsb.	- superscript of a subscript-

Subscripted and supercripted data will be terminated by a space, a comma (,), a period (.), a right parenthesis ()) or another subscript .sub. or superscript .sup..

NOTE 1 - The following defines the appearance of original and added data in a Reissue Patent on the Patent Full-Text APS File.

Original data, that forms no part of the reissue patent, will begin with .[. and end with .].  
New data (appears Italicized on the printed document) will begin with .Iadd. and end with .Iaddend.

NOTE 2 - The following defines the appearance of original and added data in a Reissue of a Reissue Patent on the Patent APS file.

Original data of the first reissue patent, that forms no part of the current reissue patent, will begin with .[. .[. and end with .]. .]. New data of the first reissue patent (appears in BOLD print on the current printed document) will begin with .Badd. and end with .Baddend.

NOTE 1 above applies to the appearance of original and added data on the current Reissue Patent.